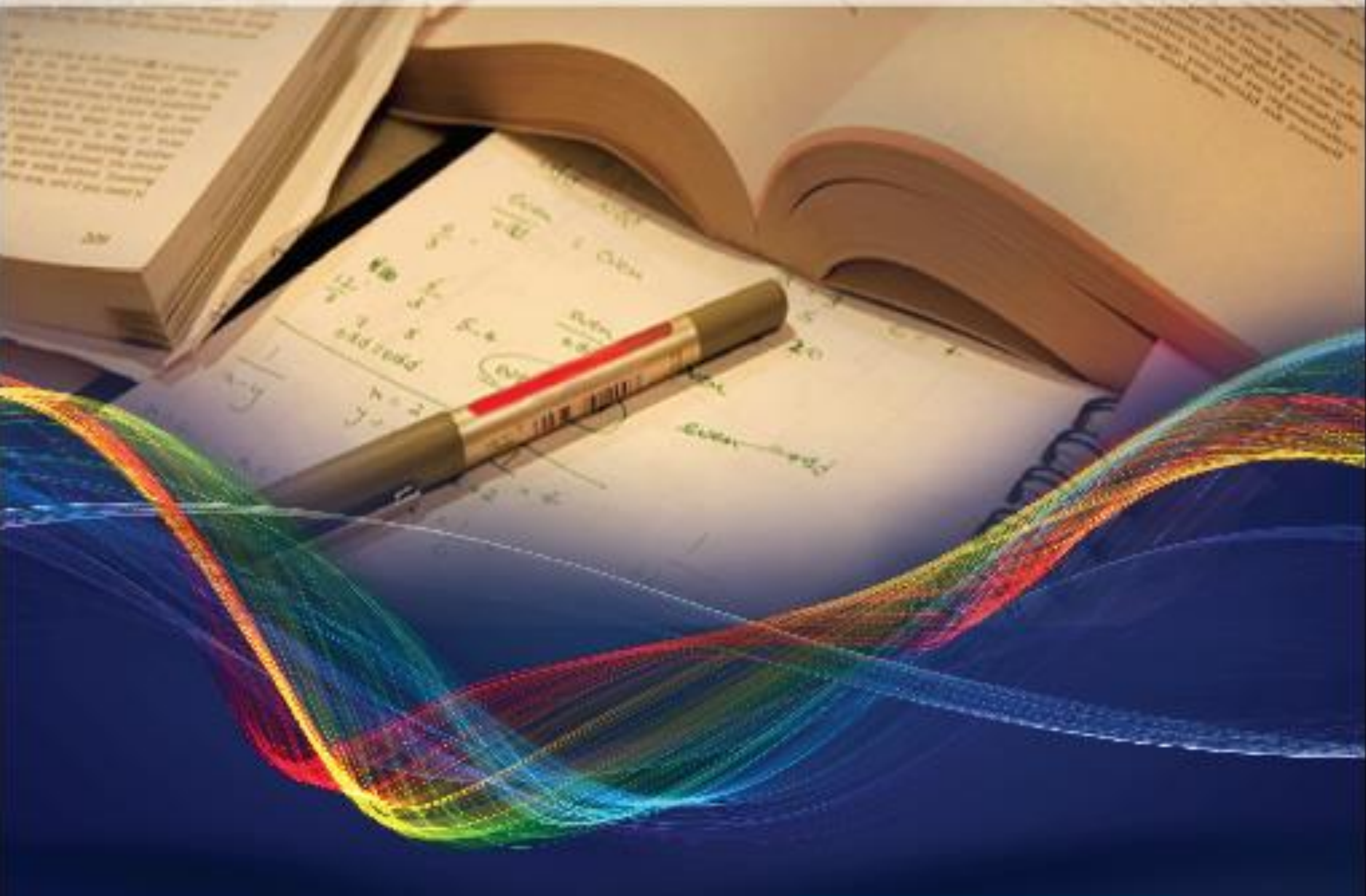
VOL : 8 **NO: 4**

Journal
of Human Development & Education For Specialized Research(JHDESR)
مجلة التنمية البشرية والتعليم للأبحاث التخصصية



The higher education sector is one of the main sectors of interest to developing and developed countries alike, because of its importance in the formation of human capital and in achieving economic and social gains for society through a qualified and trained workforce capable of causing economic growth. This study aimed to reveal the impact of artificial intelligence applications for administrative leaders in the development of human capital in the Ministry of Education in the Sultanate of Oman from their point of view. This study aimed at evaluating the efficiency of the teaching of English at the Institutes of Vocational Training in Algeria from the teachers' perception. The sample of study represented 10 teachers in the city of Algiers.

JOURNAL OF HUMAN DEVELOPMENT AND EDUCATION FOR SPECIALIZED RESEARCH| VOL: 8 ISSUE:4 |October 2022

مجلة التنمية البشرية والتعليم للأبحاث التخصصية| المجلد 8 العدد 4 |تشرين الأول/ أكتوبر 2022

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

دور تخطيط الاستثمار في التعليم العالي في تحقيق النمو الاقتصادي في العراق خلال المدة 2003–2020

The role of investment planning in higher education in achieving economic growth in Iraq from 2003-2020

م.د. داود عبد الجبار أحمد – د. سجى فاضل جواد –د. محمد كاظم شمخي

Daoud Abdul-Jabbar Ahmed - Saja Fadel Jawad - Muhammad Kazem Shamkhi

جامعة بغداد – العراق

University of Baghdad - Iraq

dawood.a@coadec.uobaghdad.edu.iq

2022

JOURNAL OF HUMAN DEVELOPMENT AND EDUCATION FOR SPECIALIZED RESEARCH| VOL: 8 ISSUE:4 |October 2022

مجلة التنمية البشرية والتعليم للأبحاث التخصصية| المجلد 8 العدد 4 |تشرين الأول/ أكتوبر 2022

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

Received |14|07|2022 – Accepted 28|09|2022 – Available online 15|10|2022

ABSTRACT

The higher education sector is one of the main sectors of interest to developing and developed countries alike, because of its importance in the formation of human capital and in achieving economic and social gains for society through a qualified and trained workforce capable of causing economic growth, and therefore the real translation of this interest By governments through what is spent on the education sector from the general budget of the state or from the gross domestic product, and thus investment in education would achieve economic and social gains for the community and contribute to achieving economic growth and achieving comprehensive development through the qualified and trained workforce, and this is not done Except by adopting the planning method in the investment process in higher education to raise the level of economic growth through the development of economic plans based on achieving optimal use of human capital.

The research dealt with the importance and analysis of the impact of investment planning in higher education on economic growth in Iraq in theory and standard through the use of the standard (ARDL) model, and among the most important results of the research, analytically, we note that there is a positive relationship between spending on higher education and domestic product at prices. The current period during the period 2003-2020, as the compound annual growth rate of spending on education reached 21.5% and the gross domestic product amounted to 11.2%, which gives an indication of the priorities of investment in higher education through the development of economic plans.

As for the standard aspect, the ARDL model showed the possibility of the trend of the relationship between education spending (independent variable) and GDP (dependent variable) to equilibrium in the short and long term through the negative and significant ECt-1 limit parameter at the 5% level.

Keywords: investment planning - spending - total output

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

الملخص

يعد قطاع التعليم العالي من القطاعات الاساسية التي تهتم به الدول النامية والمتقدمة على حد سواء، لما له من اهمية في تكوين رأس المال البشري وفي تحقيق مكاسب اقتصادية واجتماعية للمجتمع من خلال قوة عاملة مؤهلة ومدربة قادرة على احداث النمو الاقتصادي، ولذا فإن الترجمة الحقيقية لهذا الاهتمام من قبل الحكومات من خلال ما ينفق على قطاع التعليم من الموازنة العامة للدولة أو من الناتج المحلي الاجمالي ، وبهذا يكون الاستثمار في التعليم من شأنه أن يحقق مكاسب اقتصادية واجتماعية للمجتمع ويسهم في تحقيق النمو الاقتصادي وفي تحقيق التنمية الشاملة من خلال القوة العاملة المؤهلة والمدربة، وهذا لا يتم الا عن طريق تبني اسلوب التخطيط في عملية الاستثمار في التعليم العالي لرفع مستوى النمو الاقتصادي من خلال وضع خطط اقتصادية تقوم على تحقيق الاستخدام الأمثل في رأس المال البشري.
وقد تناول البحث أهمية وتحليل اثر تخطيط الاستثمار في التعليم العالي على النمو الاقتصادي في العراق نظرياً وقياسياً من خلال استخدام أنموذج (ARDL) القياسي، ومن اهم نتائج البحث، تحليلياً، نلاحظ بأن هناك علاقة ايجابية بين الانفاق على التعليم العالي والناتج المحلي بالأسعار الجارية خلال المدة 2003-2020، اذ بلغ معدل النمو السنوي المركب للإنفاق على التعليم 21.5% والناتج المحلي الاجمالي بلغ 11.2%، مما يعطي مؤشراً على اولويات الاستثمار في التعليم العالي من خلال وضع الخطط والسياسات الاقتصادية.
أما من الناحية القياسية، إن أنموذج (ARDL) اظهر امكانية اتجاه العلاقة بين الانفاق على التعليم (متغير مستقل) والناتج المحلي الاجمالي (متغير تابع)الى التوازن في الاجل القصير والاجل الطويل من خلال معلمة حد الخطأ EC_{t-1} السالبة والمعنوية عند مستوى 5% .

الكلمات المفتاحية: تخطيط الاستثمار – الانفاق – الناتج الاجمالي

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

المقدمة

تعد مسألة تخطيط الاستثمار في التعليم احدى المرتكزات الرئيسة لبناء الانسان ومعرفة متطلباته واحتياجاته والعمل على استغلال الطاقات البشرية استغلالاً اقتصادياً بكفاءة عالية، ويرجع سبب اختيار هذا الموضوع الى الدور الذي يلعبه التعليم العالي في تكوين رأس المال البشري وفي صقل مهارات العاملين في رفع مستوى انتاجيتهم ومن ثم رفع مستوى الناتج على مستوى الاقتصاد القومي، وتهدف هذه الدراسة الى ابراز دور قطاع التعليم العالي في تحقيق النمو الاقتصادي عن طريق الاستثمار في رأس المال البشري من خلال الخطط التنموية في العراق، وإن الاشكالية المطروحة على البحث ما اثر تخطيط الاستثمار في التعليم العالي في تحقيق النمو الاقتصادي؟ في حين إن فرضية البحث تنص على أن هناك علاقة طردية بين الانفاق على التعليم العالي كمتغير مستقل وبين النمو الاقتصادي المتمثل بالناتج المحلي الاجمالي كمتغير تابع.

وقد تم تقسيم البحث الى ثلاثة مباحث: تناول المبحث الاول الاطار النظري من خلال التعرف على اهمية تخطيط الاستثمار في التعليم العالي والنمو الاقتصادي، في حين تطرق المبحث الثاني الى تحليل اثر تخطيط الاستثمار في التعليم العالي على النمو الاقتصادي على العراق للمدة 2003-2020 ، فيما ركز المبحث الثالث على اثر الانفاق على التعليم العالي على الناتج المحلي الاجمالي للمدة 2003-2020 (دراسة قياسية).

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

المبحث الاول: تخطيط الاستثمار في التعليم العالي

المطلب الأول: أهمية تخطيط الاستثمار في التعليم العالي

إن التعليم كمفهوم يتعلق بالعنصر البشري، ويعبر عن الجهود التي يبذلها جيل متقدم وناضج في مجتمع ما الى الجيل الذي يليه، وذلك بطريقة تسمح بتنمية وتطوير امكانياتهم الى اقصى ما يمكن، وفي إطار معين قوامه الافكار والنظم والمؤسسات السائدة في المجتمع والمستندة الى اسس ايديولوجية واضحة من اجل المساهمة في تنمية جوانب الحياة المادية للمجتمع (Fleai , 2003: 61)

اما التعليم العالي أو الجامعي فهو مرحلة متقدمة، ويعد آخر مراحل التعليم وأرقاها، ويرتبط ارتباطاً وثيقاً بفكرة التخصص الأكاديمي الذي يستهدف سد الحاجات الحاضرة والمستقبلية للمجتمع، اذ تؤكد الدراسات الحديثة على ضرورة التحام التعليم العالي بالمجتمع وانفتاحه عليه وتقديم الخدمات له من خلال التدريب والتعليم والبحث العلمي.

ومن هنا يمكن القول بأن المشكلات التي تعاني منها الدول النامية والعربية بشكل عام هي ليست مقتصرة على الجوانب المادية فقط ، وانما افتقارها الى رأس المال البشري المتمثل بالتعليم والعلوم والمعارف الانسانية، وبهذا يكون الاستثمار في التعليم من شأنه ان يحقق مكاسب اقتصادية واجتماعية للمجتمع ويسهم في تحقيق النمو الاقتصادي وفي تحقيق التنمية الشاملة من خلال القوة العاملة المؤهلة والمدربة، مما يعني في المحصلة النهائية ان عملية الاستثمار في التعليم هي بحد ذاتها عملية الاستثمار في رأس المال البشري، الذي يعد الانسان موردا مهما من الموارد الاقتصادية الاساسية التي تقاس بها ثروة الامم، لذلك فإن الاستثمار في رأس المال البشري يركز بشكل كبير على الاستثمار في التعليم.

ونظرا لهذه الاهمية الكبيرة للتعليم وعلاقته العضوية والوثيقة بالنمو الاقتصادي في تحقيق الاهداف الاقتصادية والاجتماعية والسياسية وفقاً للمسار الذي رسمته الخطة الاقتصادية والامكانات المتاحة في المجتمع. من هنا يتبين إن في مسألة تخطيط الاستثمار في التعليم يعد احد المرتكزات الرئيسة لبناء الانسان ومعرفة متطلباته واحتياجاته من العلوم والمعارف والمهارات والقدرات المستقبلية لتحسين نوعية حياته، اي العمل على استغلال الطاقات البشرية استغلالاً اقتصادياً بكفاءة عالية، وهذا لا يمكن ان يتحقق الا بعملية تخطيطية على درجة عالية من الكفاءة والفعالية . (Ichununa, 1978:10)

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

فالتخطيط التعليمي هو عبارة عن عملية منظمة ومستمرة وقائمة على اتباع مناهج البحث العلمي ويرمي الى تحقيق اهداف واضحة ويتركز أساساً على بناء القدرة الفردية لدى الفرد وان يسهم في تقدم النواحي الاقتصادية (Fehmi , n.d.: 1-4).

المطلب الثاني: التحديات التي تواجه التعليم العالي

إن تقدم الشعوب والامم يعتمد في الاساس على التنمية الفكرية والروحية والثقافة العامة والتحولات العلمية والتكنولوجية الهائلة التي ظهرت في القرن الحادي والعشرون الذي يتسم بعصر المعلومات وثورة الاتصالات والعولمة والاقتصاد الحر الذي أسهم في تحرير الطاقات البشرية بعد ان كانت السياسات التعليمية تنتهج مناهج تقليدية تعتمد على الحفظ والتلقين، وازدادت سطوة المعرفة العلمية ولاسيما بعد ظهور وانتشار الحاسبات الآلية والقنوات الفضائية والبريد الالكتروني وشبكة التواصل الاجتماعي وبرامج ومواد تعليمية أكثر كفاءة ودقة، فضلاً عن ذلك الطلب المتزايد على التعليم العالي والجامعي بسبب الانفجار السكاني الذي شهده العالم، مما ترتب عليه ارتفاع في مستويات المعيشة وطموحات الشباب في الرفع من مستواهم الاجتماعي والاقتصادي.

وتشير الدراسات الحديثة الى أن هدف التعليم ولاسيما التعليم العالي لم يعد قاصراً على اشباع حاجات الافراد ومطالبهم الشخصية, وتعدى ذلك الى تحقيق حاجات المجتمع ومطالبه المختلفة في الحاضر والمستقبل (National Human Development Report, 2014:90) .

فالتعليم العالي يواجه في الوقت الراهن تحديات ومتغيرات متعددة توجب مراجعة فلسفته واهدافه وتنظيماته ومناهجه، ولا يقتصر الامر على حل مشكلاته الحاضرة وانما أيضاً لمواجهة مشكلات المستقبل، وبذلك لا يمكن التخطيط لمستقبل النظام التعليمي بعده نظاماً فرعياً يخضع في حركته وتطوره الى النظام الكلي للمجتمع الذي يحويه بعيداً عن التخطيط للأنشطة الاقتصادية والاجتماعية الاخرى.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

المطلب الثالث: إسهامات التعليم العالي في النمو الاقتصادي

يعبر مفهوم النمو الاقتصادي عن الزيادة في الناتج القومي كماً ونوعاً والمترتب عن زيادة عوامل الانتاج من رأس المال وعمل ومواد أولية وتحسن فعاليتها وكفاءتها الانتاجية خلال مدة زمنية معينة.

إن علاقة التعليم بالنمو الاقتصادي تمّ الاهتمام بها بعد أن اتضح إن زيادة الناتج ليست مقتصرة على عوامل الانتاج المادية فقط ، ويتم زيادته من خلال عدد من المتغيرات الاقتصادية الكلية مثل الانتاجية ونصيب الفرد من الدخل القومي وتوفير فرص عمل للقوى العاملة وتوفير نوع من التدريب والمهارات الاساسية لهم، وتعبر المتغيرات بمجموعها من رأس المال البشري، ومن ثم أصبح رأس المال البشري موضوع استثمار وتراكم وانتاج، ويمكن تعريف رأس المال البشري بأنه مجمل الكفاءات والمعارف والخبرات التي يمتلكها الفرد والتي لها صلة وارتباط بالنشاط الاقتصادي،وهذا يعني إن التعليم والتدريب عنصران أساسيان لرأس المال البشري (Habeeb, 1981: 16)

المبحث الثاني: تحليل تخطيط الاستثمار في التعليم العالي على النمو الاقتصادي في العراق خلال المدة 2003-2020

اكدت معظم الدراسات الاقتصادية الحديثة إن التعليم العالي يعد استثماراً اقتصادياً جيداً بعده عنصراً مهماً يؤثر في مؤشرات النمو الاقتصادي فهو يزيد من انتاجية العامل ويزيد من معدلات النمو في الناتج المحلي الاجمالي، فضلاً عن كونه اداة من ادوات اعادة توزيع الدخول بين افراد المجتمع.

سوف نتطرق في هذا المبحث الى واقع الانفاق على التعليم العالي في العراق وتطوره خلال الخطط التنموية بعد عام 2003، ونصيب الانفاق على التعليم من الناتج المحلي الاجمالي.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

المطلب الأول: تطور الانفاق على التعليم العالي في العراق خلال الخطط التنموية خلال المدة 2003-2020

تشير الخطط التنموية في العراق بعد عام 2003 الى المراحل الآتية:

1- خطة التنمية الوطنية للسنوات 2010-2014:

على الرغم من تعرض التعليم قي العراق ولاسيما التعليم العالي بعد عام 2003 الى تدهور لجميع مرافق العملية التعليمية، وعلى سبيل المثال،ارتفاع معدلات الامية، فقد بلغت 28% من اجمالي السكان بعمر 10 سنوات فأكثر، والعجز الكبير في الابنية المدرسية وارتفاع تكاليف الدراسة وارتفاع التسرب بين صفوف الطلبة في التعليم العالي، اذ بلغت نسب التسرب 3.1% خلال العام الدراسي 2007-2008، فضلاً عن التحديات الكبيرة التي ادت إلى تدني المستوى التعليمي في العراق، فقد التزمت الحكومة العراقية وعلى وفق مبادىء الدستور العراقي 2005 بتوفير فرص التعليم لجميع افراد المجتمع وبشكل متساو.

اما في مجال الانفاق على التعليم العالي، لقد استمرت تدني التخصيصات الموجهه لقطاع التعليم العالي من الموازنة العامة للدولة خلال السنوات التي اعقبت عام 2003، إذ كانت نسبة الموازنة الاستثمارية للتعليم العالي من مجموع الموازنة الاستثمارية لقطاع التربية والتعليم 3% عام 2007، انخفضت الى 2% عام 2008 ، مما يعكس تدني الاهمية المعطاة للموازنة الاستثمارية لقطاع التعليم العالي .

(National Development Plan 2010-2014, 2009: 116-120)

2 ـ خطة التنمية الوطنية للسنوات 2013-2017:

على الرغم من الزيادة المستمرة في الانفاق على التعليم العالي من الموازنة العامة للدولة في خطة التنمية 2013-2017، وتمثل النفقات الجارية النصيب الاكبر من موازنة التعليم في العراق، إذ تم تخصيص2198.563 مليون دينار عام 2010، انخفضت الى 2174.414 مليون دينار عام 2011، ثم ارتفعت الى 2612.382 مليون دينار عام 2012، فيما تنخفض النفقات الاستثمارية الى مستويات متدنية كما هو موضح في الجدول(1)، اذ تم تخصيص 350 مليون دينار عام 2010، ثم ارتفعت الى 400 مليون دينار عام 2011، ثم ارتفعت الى 490 مليون دينار عام

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

2012، وان نسبة المخصص للتعليم العالي من الموازنة العامة للدولة 3% عام 2010، وفي عام 2011 انخفضت الى 2.7% عام 2011، واستمرت بالانخفاض عام 2012 حتى وصلت نسبة 2.6%، مما يعكس عدم الاهتمام من قبل واضعي السياسة للموازنة الاستثمارية لقطاع التعليم العالي.

الجدول (1)- المبالغ المخصصة للتعليم العالي من الموازنة العامة للدولة للسنوات 2010 – 2012

السنة	الموازنة الجارية مليون دينار	الموازنة الاستثمارية مليون دينار	المجموع	نسبة المخصص من الموازنة العامة للدولة
2010	2198.563	350	2548.563	3%
2011	2174.414	400	2574.500	2.7%
2012	2612.382	490	3102.382	2.6%

Source: Ministry of Planning and Development Cooperation, National Development Plan 2013-2017, Baghdad, 2013, p 211

3- خطة التنمية الوطنية 2018-2022:

تمثل خطة التنمية الوطنية 2018-2022 بمثابة برنامج عمل نحو المستقبل ضمن اطار التنمية المستدامة بأبعادها الاقتصادية والاجتماعية والسياسية والثقافية وتتكون مجموعة من السياسات والاستراتيجيات على مستوى الاقتصاد القومي تهدف الى تنمية راس المال البشري من خلال التخصيصات الاستثمارية من الموازنة العامة للدولة، وتركز هذه الخطة على تحسين كفاءة النظام التعليمي وتسريع وتائر النمو الاقتصادي وتأمين التوازن بين مخرجات العملية التعليمية ومتطلبات سوق العمل بالتركيز على التعليم والتدريب المهني، على الرغم من أن هناك مجموعة من التحديات تواجه العملية التعليمية برمتها ولاسيما التعليم العالي، منها، تدني التصنيف الدولي للجامعات العراقية وضعف الجوانب الاكاديمية وقدراتها التنافسية ومحدودية البنى التحتية وضعف المستلزمات والمختبرات والاجهزة التعليمية الحديثة وتزايد اعداد الطلبة

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

وعدم امكانية تطبيق المعايير التصميمية (المحلية والاقليمية والدولية) لمتطلبات بناء الجامعات بسبب الزيادة في معدلات قبول الطلبة وضعف الشراكة بين المؤسسات التعليمية في القطاعين الحكومي والخاص وغيرهما.

اما في مجال الانفاق على التعليم العالي فلا توجد هناك بيانات واحصاءات عن التخصيصات الاستثمارية في هذه الخطة واقتصر الامر فقط على موازنات قطاع التربية من الموازنة العامة للدولة.

المطلب الثاني: نصيب الانفاق على التعليم من الناتج المحلي الاجمالي في العراق خلال المدة 2003–2020

من الواضح ان التعليم يهدف اساساً الى اعداد القيادات البشرية المؤهلة لمختلف القطاعات الاقتصادية المكوَّنة للناتج المحلي الجمالي والتي تعمل على تحقيق النمو الاقتصادي.

ويعد العراق من الدول النامية والعربية الرائدة في مجال الاستثمار والانفاق على التعليم بصورة عامة والتعليم العالي بصورة خاصة لما له من دور كبير في تطوير النظام التعليمي.

اولاً: تطور الناتج المحلي الاجمالي:

يوضح الجدول (2) بأن الناتج المحلي الاجمالي في العراق بالأسعار الجارية ارتفع من (29585788.6) مليون دينار عام 2003 الى (157026061.6) مليون دينار عام 2008 وبمعدل متوسط نمو سنوي بلغ (41.1%)، ويعود ذلك الى زيادة العوائد المتأتية من ارتفاع اسعار النفط ، الذي يستأثر قطاع النفط في العراق الحصة الاكبر من بين القطاعات الاقتصادية الاخرى في تمويل الناتج المحلي الاجمالي، اذ ارتفع سعر برميل النفط من 36 دولار عام 2004 الى 94.5 دولار عام 2008، ثم انخفض الناتج الى (157026061.6) مليون دينار عام 2009 وبمعدل نموسنوي سالب بلغ(16.9%) بفعل انخفاض اسعار النفط التي وصلت الى 61 دولار وبفعل الازمة المالية التي شهدها العالم انذاك في ذلك العام، ثم ارتفع الناتج خلال السنوات 2010، 2011 ،2012، 2013 وبمعدلات نمو سنوية موجبة بلغت 24.1%، 34.1%، 16.9%، 7.6% للسنوات نفسها على التوالي.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

بعد عام 2013 حصل هناك تذبذبا في قيم الناتج المحلي صعوداً ونزولاً بفعل تذبذب اسعار النفط العالمية ومن ثم انخفاض الايرادات التي تموّل النفقات العامة، وبصورة عامة هناك ارتفاع في الناتج خلال المدة 2003-2020 وبمعدل نمو سنوي مركب موجب بلغ 11.2% .

ثانياً: واقع الانفاق على التعليم العالي في العراق خلال المدة 2003-2020:

يوضح الجدول (2) الانفاق على التعليم العالي بالأسعار الجارية في العراق، إذ ارتفع الانفاق من (335363.8) مليون دينار عام 2003 الى (11197654.3) مليون دينار عام 2020 وبمعدل نمو سنوي مركب موجب بلغ 21.5%، غير إن هذه الزيادات في اجمالي النفقات انما تعود الى ازدياد عدد الطلبة سواء في الدراسات الاولية والمعاهد الفنية وطلبة الدراسات العليا وغيرها من الامور الموجبة لزيادة هذه النفقات.

الجدول (2) تطور الانفاق على التعليم العالي بالأسعار الجارية ونسبته من الناتج المحلي الاجمالي في العراق خلال المدة 2003-2020.

السنوات	الناتج المحلي الاجمالي (مليون دينار)	معدل النمو السنوي للناتج %	الانفاق على التعليم العالي (مليون دينار)	نسبة الانفاق من الناتج %
2003	29585788.6	-	335363.8	1.1
2004	53235358.7	79.9	1802610.9	3.4
2005	73533598.6	38.1	1472788.2	2
2006	95587954.8	29.9	2051914.3	2.1
2007	111455813.4	16.6	2728653.1	2.4
2008	157026061.6	40.9	4943189.8	3.1
2009	130643200.4	16.9 -	5267519.6	4

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

4	6617860.1	24.1	162064565.5	2010
3.6	7842843.4	34.1	217327107.4	2011
3.6	9194187.2	16.9	254225490.7	2012
3.7	10105925.3	7.6	273587529.2	2013
3.8	10212502.2	2.7 -	266332655.1	2014
4.9	9465422.5	26.9 -	194680971.8	2015
5.1	10040288.6	1.2	196924141.7	2016
4.8	10617714.7	12.6	221665709.5	2017
4.3	11467131.9	21.3	268918874.0	2018
4.3	12040488.5	3.3	277884869.4	2019
5.6	11197654.3	28.5 -	198774325.4	2020
	21.5 %		11.2 %	معدل النمو السنوي المركب

Source: Ministry of Planning, Central Agency for Statistics and Information Technology, Directorate of National Accounts.

The ratios were extracted by researchers.

ثالثاً : نسبة الانفاق على التعليم العالي من الناتج المحلي الاجمالي:

يتضح من خلال الجدول(2) ان نسبة الانفاق على التعليم العالي من الناتج المحلي الاجمالي بالاسعار الجارية فقد شكلت نسباً متواضعة لاتشكل عبئاً على الموارد المتاحة في البلد، اذ بلغت 1.1% عام 2003 وارتفعت الى 3.4%

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

عام 2004، ثم انخفضت في السنوات 2005، 2006، 2007 لتبلغ 2%، 2.1%، 2.4% للسنوات نفسها على التوالي، وذلك بسبب انخفاض معدلات النمو في الناتج المحلي الاجمالي الى 38.1%، 29.9%، 16.6% لنفس السنوات على التوالي بعد إن كان معدل النمو السنوي في عام 2004 بلغ 80% تقريباً، ثم ارتفعت نسبة الانفاق الى الناتج عام 2008 الى 3.1% والى 4% خلال السنوات 2009، 2010 بفعل ارتفاع سعر النفط عام 2008، على الرغم من انخفاضه عام 2009، وارتفاعه عام 2010، ثم انخفضت النسبة للسنوات اللاحقة خلال السنوات 2011، 2012، 2013، 2014 بفعل الاحداث الامنية التي مرت على العراق، وتخصيص جزءاً كبيراً من الايرادات لتمويل العمليات العسكرية، مما ادى الى انخفاض نسبة الانفاق من التعليم من الناتج المحلي الاجمالي ، ثم ارتفعت نسبة الانفاق في السنوات التي تلت عام 2014 حتى بلغت عام 2020 الى 5.6%.

وبصورة عامة فقد بلغ معدل النمو السنوي المركب في الانفاق على التعليم العالي من الناتج 21.5% خلال المدة 2003-2020.

إن نسبة ماينفق على التعليم بصورة عامة من الناتج المحلي الاجمالي لعدد من الدول أكبر من نسبة الانفاق على التعليم من الناتج في العراق لعام 2015، فنسبة الانفاق من الناتج في الارجنتين بلغت 5.9%، وفي اوروبا 6.2%، والبرازيل 6%، وايران 6.9%، وفي البحرين 5.9%.

المبحث الثالث: أثر الانفاق على التعليم العالي على الناتج المحلي الاجمالي في العراق خلال المدة 2003-2020 دراسة قياسية)

تفترض الدراسة إن الانفاق على التعليم كمتغير مفسر(Independent variable) تؤثر في الناتج المحلي الاجمالي (GDP) كمتغير تابع (Dependent variable) ، وعلى هذا الاساس تم بناء الأنموذج القياسي ، ونظراً لصغر حجم عينة الدراسة (سنوية) للمدة (2003-2020) ، فقد تم تحويل البيانات الى فصلية وبالأعتماد على بيانات الفصل الثاني نفسها وبطريقة دنتون (**Denton method**) لتحويل التكرارات المنخفضة (سنوية) الى تكرارات عالية (فصلية) وبواسطة برنامج (**Eviews10**)، وسيتم استعمال أنموذج الانحدار الذاتي للابطاء الموزع

(ARDL) للتكامل المشترك واختبار الحدود وايجاد العلاقة القصيرة والطويلة الآجل سواء كانت المتغيرات ذات درجة تكامل من الدرجة الصفرية I(0) ، أو متكاملة من الرتبة I(1) أو مزيج بينهما .

اولاً : توصيف الأنموذج:

يمكن توضيح العلاقة الدالية بين الناتج المحلي الاجمالي (GDP) كمتغير تابع والانفاق على التعليم (**EXPN**) كمتغير مفسر , وعلى وفق النظرية الاقتصادية والدراسات التطبيقية سيتم تحديد العلاقة الدالية الآتية : (Gujarati , 2004, 503)

GDP= f (**EXPN**).

وإن : GDP: الناتج المحلي الاجمالي ، **EXPN**: الانفاق على التعليم .

ومن ثم يمكن وضع أنموذج (ARDL)) لقياس وتحليل العلاقة قصيرة وطويلة الاجل بين متغيرات الأنموذج ومن خلال المعادلة وكما يأتي :

$$\Delta\, GDP_t = \propto_0 + \sum_{i=1}^{n} \beta_1\, \Delta GDP_{t-i} + \sum_{i=1}^{n} \beta_2\, \Delta EXPN_{t-i} + \lambda_1\, GDP_{t-1} + \lambda_1\, EXPN_{t-1} + \varepsilon_t \ldots$$

اذ إن :

Δ: الفرق الاول.

GDP : الناتج المحلي الاجمالي.

α_0: الحد الثابت.

EXPN: الانفاق على التعليم.

n: الحد الاعلى لمدد التأخر الزمني

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

t: مدة البحث. (Q_1 2003 – Q_4 2020)

β_1،B_2 : الميل عند الاجل القصير.

λ_1،λ_2 :الميل عند الاجل الطويل.

ε_t: حد الخطأ ألعشوائي.

ثانياً : اختبار جذر الوحدة للسكون بطريقة ديكي . فولر الموسع (Augmented Dickey-Fuller)

يهدف اختبار جذر الوحدة الى فحص خواص السلاسل الزمنية لكل من الانفاق على التعليم والناتج المحلي الاجمالي ، والتأكد من سكون السلاسل الزمنية وتحديد درجة تكامل كل متغير من خلال مقارنة اختبار القيم الحرجة (القيم الجدولية) عند المستويات (1%،5%،10%) مع احصائية t المحتسبة ، فاذا كانت قيمة t المحتسبة اكبر من القيمة الجدولية ، دل ذلك على معنوية المتغير عند الرتبة المعينة ، اي ترفض فرضية العدم وتقبل الفرضية البديلة والسلسلة تكون ساكنة ، مع الاشارة الى أن القيم تؤخذ بالمطلق ، ويمكن معرفة ذلك السكون من خلال قيمة (prob) فعندما تكون قيمته اقل من (5%) يعني معنوية والمتغير ساكن , واذا كانت اكبر من (5%) تعني غير معنوية والمتغير غير ساكن (**Eviews 10**, **2017**:**40**)، ويمكن توضيح ذلك من خلال الجدول الآتي :

الجدول (3) اختبار ديكي وفولر الموسّع (**Augmented Dickey–Fuller**)

1st difference الفرق الاول			level المستوى				
None بدون	**Trend & Intercept** حد ثابت واتجاه عام	**Intercept** حد ثابت	**None** بدون	**Trend & Intercept** حد ثابت واتجاه عام	**Intercept** حد ثابت		
0.0000	**0.0005**	**0.0002**	**0.7610**	**0.8660**	**0.3069**	**GDP**	**Prob.**

الاحتمالية 5%	**EXPN**	**0.4415**	**0.9884**	**0.9745**	**0.0000**	**0.0001**	0.0000

- المصدر : من عمل الباحثين بالاعتماد على البيانات والملحق من خلال برنامج (9 Eviews).

يوضح الجدول (3) ان متغير الناتج المحلي الاجمالي (GDP) ومتغير الانفاق على التعليم (**EXPN**) ساكنان عند الفرق الاول I(1) ، عند الحد (Intercept) و حد واتجاه (Trend & Intercept) وبدون (None) عند مستوى معنوية 5% ، اي إن قيمة (prob) اقل من 5% .

ويمكن استعمال أنموذج (ARDL) لقياس العلاقة بين المتغيرات محل البحث ، لكون ان أنموذج اختبار حدود (ARDL) هو الاكثر ملاءمة ويوفر نتائج أفضل من طرائق التكامل المشترك متعددة المتغيرات **Fatukasi & et al 2015: 20**) وفي حالة صغر حجم العينة وسكونها عند الفرق الاول I(1) ، مقارنة بالطرائق الاخرى المتبعة لاختبار التكامل المشترك (**Dritsakis, 2011:7**)

ثالثاً : انحدار التكامل المشترك على وفق أنموذج (ARDL) واختبار الحدود

لاختبار مدى تحقق التكامل المشترك والذي يمثل العلاقة التوازنية طويلة الاجل بين المتغيرات المدروسة ، تم استعمال طريقة اختبار الحدود او النطاق (Bounds test approach) وتتميز هذه الطريقة بإمكانية تطبيقها سواء أكانت المتغيرات متكاملة من الدرجة I(0) ، ام متكاملة من الدرجة الاولى I(1) ام مزيج بينهما ويمكن استعمالها في العينات الصغيرة الحجم ، وتعتمد هذه الطريقة على اختبار احصاء (F– statistic) ، اذ يتم اختبار فرضية العدم (Ho) القائلة بعدم وجود تكامل مشترك بين متغيرات الأنموذج مقابل الفرضية البديلة (1H) القائلة بوجود تكامل مشترك بين متغيرات الأنموذج.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

يوضح الجدول (4) ان قيمة F المحتسبة اكبر من الحد الاعلى I (1) عند مستوى معنوية 5% ، وهذا يعني وجود تكامل مشترك بين المتغيرين ، ومن ثم ترفض فرضية العدم (عدم وجود تكامل مشترك بين المتغيرين) وتقبل الفرضية البديلة (وجود تكامل مشترك) مما يؤكد وجود علاقة توازنية طويلة الاجل .

الجدول (4) اختبار الحدود **F-Bound test** للتكامل المشترك

قيمة (F) الاحصائية F-statistic Value	حدود القيم الحرجة Critical Value Bounds		
	I1 Bound الحد الاعلى	**I0 Bound** الحد الادنى	Significance مستوى المعنوية
10.40957	**3.51**	**3.02**	10%
	4.16	**3.62**	5%
	4.79	**4.18**	2.5%
	5.58	**4.94**	1%

- المصدر : من عمل الباحثين بالاعتماد على البيانات والملحق من خلال برنامج (Eviews 9).

رابعاً: اختبارات التشخيص للبواقي

يبين الجدول (5) ان الأنموذج لا يعاني من مشكلة التوزيع الطبيعي على وفق اختبار (**Histogram – Normality**)، إذ بلغت القيمة الاحتمالية لها(0.374193) وهي اكبر من مستوى معنوية 5% , وبهذا نقبل بالفرضية العدم التي تشير الى أن البواقي تتوزع توزيعاً طبيعياً ، ونرفض الفرضية البديلة .

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

اما بالنسبة لمشكلتي الارتباط التسلسلي(**Serial Correlation**) ومشكلة عدم التباين(**Heteroskedasticity**) فأن الأنموذج كذلك لايعاني من مشكلة وعند الاحتمالية (0.1838) و (0.9314) , وما يؤكد ذلك قيمة (**Prob. Chai-Square**) والبالغة(0.1043) و (0.8993) على التوالي ، وكلاهما غير معنوي عند مستوى 5% ومن ثم ترفض الفرضية البديلة القائلة بوجود مشكلة وتقبل فرضية العدم (عدم وجود مشكلة).

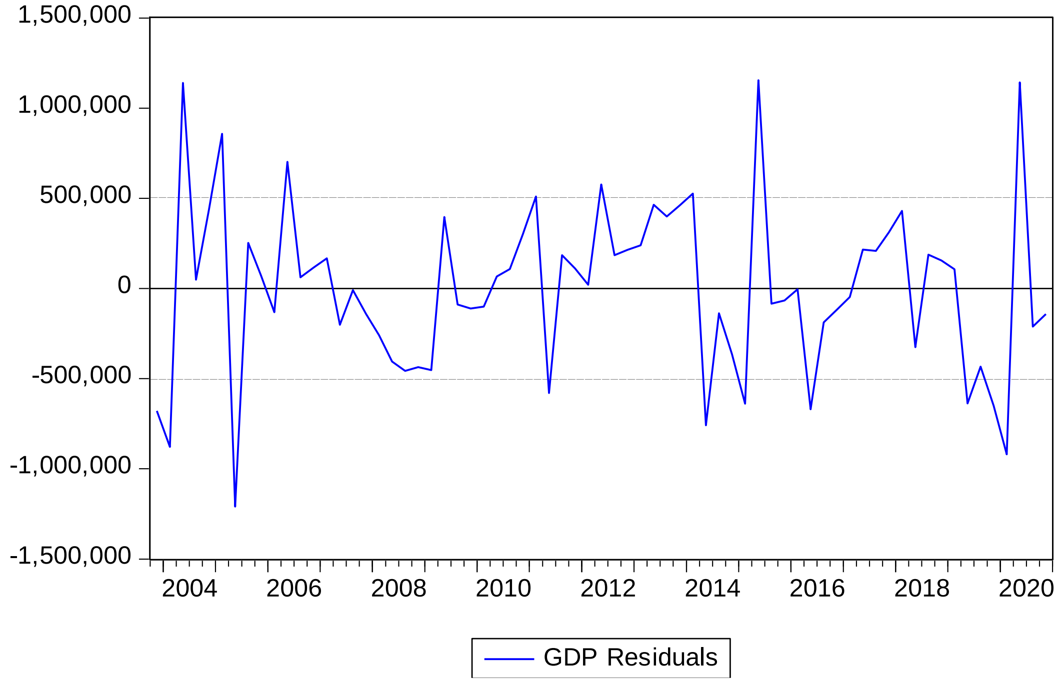
الجدول (5) اختبارات التشخيص للبواقي (**Residual Diagnostics test**)

المعلمات	قيم الاختبار
Histogram – Normality Test: **Prob**.	 0.374193
Breusch-Godfrey Serial Correlation LM Test: **Prob**. **F** **Prob**. **Chai-Square**	 0.1838 0.1043
Breusch-Godfrey Heteroskedasticity Test: **Prob**. **F** **Prob**. **Chai-Square**	 0.9314 0.8993

- المصدر: من عمل الباحثين بالاعتماد على البيانات والملحق من خلال برنامج (Eviews 9).

ويبين الشكل (1) ان البواقي Residuals (حد الخطأ) كانت ساكنة عند المستوى I(0)، وتؤثر تذبذبها حول متوسطها الصفري ، وهذا يعني امكانية وجود آلية تضمن التوازن طويل الاجل من خلال آلية تصحيح الخطأ (ECM)

الشكل (1) البواقي **Residuals** (حد الخطأ)



- المصدر : من عمل الباحث بالاعتماد على البيانات ومن خلال برنامج (Eviews 9).

خامساً : تقدير العلاقة قصيرة وطويلة الاجل لأنموذج تصحيح الخطأ (ECM)

إن تحديد العلاقة قصيرة الامد بين الانفاق على التعليم والناتج المحلي الاجمالي يتم من خلال تحديد أنموذج تصحيح الخطأ والذي يمثل الخطوة الثانية للأنموذج (ARDL)) , وتمثل المقدرات بصيغة الفرق الاول مع أضافة حد تصحيح الخطأ لمدة تباطئ زمني لاحق ويرمز له ($\mathbf{EC_{t-1}}$) وبقيمة متوقعة سالبة واصغر من الواحد , وكما موضح في الجدول الآتي:

الجدول 6 المقدرات قصيرة وطويلة الاجل و $\mathbf{EC_{t-1}}$ (جزء **1**)

مقدرات الاجل القصير (Short term)		
Prob. الاحتمالية	**Coefficient** المعامل	**Variable** المتغير

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

0.0000	**28.128539**	D(EXPN)
0.0000	-24.444512	D(EXPN(-1))
0.0000	-0.068862	CointEq(-1)

Cointeq = GDP - (18.5173*EXPN + 10038068.5946)

(جزء 2)

مقدرات الاجل الطويل (Long term coefficients)		
Prob. الاحتمالية	**Coefficient** المعامل	**Variable** المتغير
0.0000	18.517310	EXPN
0.0000	10038068.594624	**C**

- المصدر: من عمل الباحثين بالاعتماد على البيانات والملحق من خلال برنامج (9 Eviews).

يتضح من الجدول (6) الجزء 1 ، إن هناك استجابة قصيرة الاجل طردية ومعنوية بين(GDP) كمتغير تابع و(EXPN) كمتغير مفسر، وبلغت درجة معامل المتغير المفسر (**28.128539**) وباحتمالية (0.0000) بمعنى ان الناتج المحلي الاجمالي يتأثر طردياً بالإنفاق على التعليم ، اي ان ارتفاع الانفاق على التعليم بمقدار وحدة واحدة ، يؤدي الى زيادة الناتج المحلي الاجمالي بمقدار(**28.128539**) وهذا امر منطقي اذ إن زيادة الانفاق على التعليم يؤدي الى زيادة الناتج المحلي الاجمالي ومطابق للنظرية الاقتصادية .

وبخصوص معامل تصحيح الخطأ ($\mathbf{EC_{t-1}}$) ، فقد بلغت قيمة معامله((-0.068862) وباحتمالية (0.0000) ، ومع وجود هذين الشرطين (السالبية والمعنوية) ، فان الأنموذج يتجه للتوازن في الاجل الطويل، بمعنى آخر ان 6.88% من اخطاء الاجل القصير يمكن ان تصحح في وحدة الزمن (فصل)، من اجل العودة الى الوضع التوازني طويل الاجل.

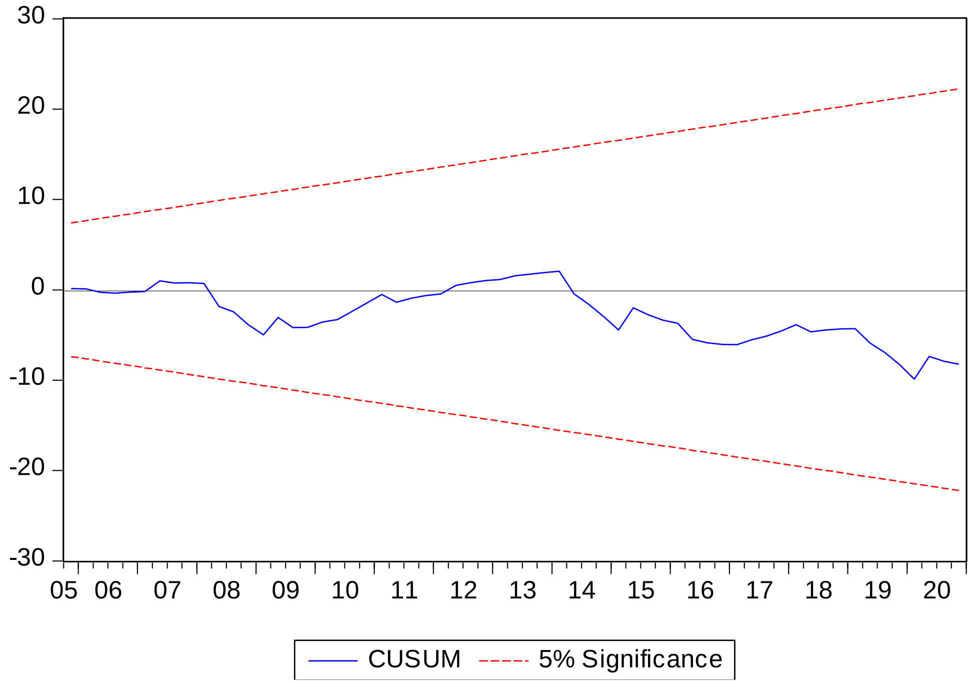
بمعنى ان (4*6.88=27.52% فصل) من اخطاء الاجل القصير ، يمكن أن تصحح في وحدة الزمن (سنة) ، من اجل العودة الى الوضع التوازني طويل الاجل، وهي سرعة تعديل جيدة من اجل العودة الى الوضع التوازني طويل الأجل.

اما (الجزء **2**) ، فقد اوضح وجود استجابة طويلة الاجل طردية ومعنوية بين الناتج المحلي الاجمالي والانفاق على التعليم ، ونظراً لمعنوية وسالبية معامل تصحيح الخطأ ومن ثم يؤكد وجود علاقة قصيرة وطويلة الاجل.

سادساً : اختبار الاستقرار الهيكلي لأنموذج (ARDL) المقدر

تبين نتائج اختبار الاستقرارية الهيكلية لأنموذج (ARDL) والذي يوضح العلاقة قصيرة والطويلة الاجل من خلال استعمال اختبار المجموع التراكمي للبواقي المتابع واختبار المجموع التراكمي لمربعات البواقي المتابعة (CUSUM Test & CUSUM of Squares Test) ، اذ نلاحظ من الشكل البياني (2) ان كلا الاختبارين يقع داخل الحدود الحرجة (حدود الثقة) عند مستوى معنوية 5% ، وهذا يدل على أن معلمات الأنموذج القصيرة والطويلة الاجل مستقرتان عبر الزمن .

الشكل (2) المجموع التراكمي للبواقي المتابع



المصدر: من عمل الباحث بالاعتماد على البيانات والملحق من خلال برنامج (Eviews)

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

الاستنتاجات والتوصيات

اولاً: الاستنتاجات

1- إن قطاع التعليم العالي في العراق يفتقر الى رؤية واضحة من الممكن الاعتماد عليها في وضع خطط مستقبلية يمكن الاستفادة منها في رفع معدلات النمو الاقتصادي، لما يسهم هذا القطاع الحيوي في تكوين القدرات البشرية.

2- انخفاض الانفاق على التعليم العالي في العراق مقارنة ببعض الدول التي تم ذكرها في متن البحث انعكس بصورة واضحة على انخفاض نسب الانفاق على التعليم من الناتج المحلي الاجمالي خلال مدة البحث.

3- من خلال الدراسة نلاحظ بأن هناك علاقة ايجابية بين الانفاق على التعليم العالي والناتج المحلي بالأسعار الجارية خلال المدة 2003-2020، اذ بلغ معدل النمو السنوي المركب للإنفاق على التعليم 21.5% والناتج المحلي الاجمالي بلغ 11.2%، مما يعطي مؤشراً على اولويات الاستثمار في التعليم العالي من خلال وضع الخطط والسياسات الاقتصادية.

4- على الرغم من العلاقة الايجابية للعلاقة ما بين الانفاق على التعليم والناتج، الا إن نظام التعليم في العراق لايزال يعاني من قصور لها تأثيرات سلبية على الاقتصاد القومي من خلال ضعف التخصيصات الاستثمارية من الموازنة العامة للدولة.

5- يعد الانفاق على التعليم استثماراً في البشر يسهم في تحقيق النمو الاقتصادي.

6- إن أنموذج (ARDL))اظهر امكانية اتجاه العلاقة بين الانفاق على التعليم (متغير مستقل) والناتج المحلي الاجمالي (متغير تابع) الى التوازن في الاجل القصير والاجل الطويل من خلال معلمة حد الخطأ $\mathbf{EC_{t-1}}$ السالبة والمعنوية عند مستوى 5% .

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

ثانياً التوصيات

1- ربط استراتيجيات الجامعات في التعليم العالي وخططها بخطط التنمية الوطنية في العراق، من اجل مواكبة التطور الحاصل في تحقيق النمو الاقتصادي على مستوى القطاعات الاقتصادية المكونة للناتج المحلي الاجمالي.

2- ضرورة الاهتمام بتمويل التعليم العالي وزيادة نسبة ما ينفق عليه من التخصيصات الاستثمارية، لما له من أهمية في اعداد وتهيئة الملاك البشري الضروري لتطوير الاقتصاد الوطني وتحقيق التقدم الذي يسعى اليه الفرد والمجتمع، ويجب ان تكون هذه الزيادة مواكبة للزيادة الحاصلة في اعداد الطلبة الملتحقين في المؤسسات التعليمية.

3- تشجيع القطاع الخاص على المساهمة في تمويل الجامعات العراقية بما يسهم في تطوير التعليم العالي.

4- الاهتمام بالتعليم العالي لضمان مخرجات تلبي احتياجات ومتطلبات مؤسسات سوق العمل من خلال تأمين النفقات المالية اللازمة وتطويره، بما يتناسب مع اهمية التعليم العالي والعوائد الاقتصادية والاجتماعية المترتبة عليه.

References

1- The National Human Development Report 2014. (2014). edition 1. House of wisdom. Baghdad. Iraq

2- AL-Habeeb, Mossadeq Jameel. (1981). Education and Economic Development, Dar Al-Rasheed Publishing. Baghdad. Iraq.

3- Ishonona, Shaul, (1978). Master's thesis submitted to the College of Administration and Economics. Baghdad University. Baghdad, Iraq.

4- Fleai, Farouk Obeida, (2003). The Economics of Education. edition 1. Al Masirah Publishing House. Amman. Jordan.

5- Fehmi, Muhammad Seif El-Din, (no date) Educational planning: its foundations, methods and problems. Egypt.

6- Ministry of Planning and Development Cooperation, Central Agency for Statistics and Information Technology. Directorate of National Accounts. Data series on GDP and expenditure on higher education for the years 2003-2020, Baghdad. Iraq

7- Ministry of Planning and Development Cooperation. (2009). National development plan for the years 2010-2014. Baghdad. Iraq.

8- Ministry of Planning and Development Cooperation, (2013). National development plan for the years 2013-2017. Baghdad. Iraq.

9 - EViews 10 (2017)" *EViews 10 User's Guide I*", (2nd Edition). October 16. 2017.

10 - Gujarati, D. N. (2004) "Basic *Econometrics*", 4th ed. New York, McGraw-Hill Companiesmm. Inc.

11- Fatukasi Bayo, Olorunleke Gabriel Kola, Olajide Gbenga F. & Alimi R. Santos Bounds (2015) "Testing Approaches to the Analysis of Macroeconomic Relationships in Nigeria". *European Journal of Business and Management* Vol.7, No.8.

12- Dritsakis, Nikolaos (2016) "Demand for money in Hungary: An ARDL Approach" Department of Applied Informatics, University of Macedonia, Economics and Social Sciences. 156 Egnatia Street, 540 06 Thessaloniki, Greece.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

أثر تطبيقات الذكاء الاصطناعي في تنمية رأس المال البشري للقيادات الإدارية في وزارة التربية والتعليم بسلطنة عمان من وجهة نظرهم

The impact of artificial intelligence applications in developing the human capital of administrative leaders in the Ministry of Education in the Sultanate of Oman from their point of view

أحمد بن سعيد بن حمود اليحمدي & إسماعيل حسين أمزات

Ahmed Said Hamood Al yahmadi & Ismail Hussein Amzat[2]

International Islamic University of Malaysia (IIUM).

a.yahmdi@moe.om

2022م

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

Received |12|08|2022 – Accepted 28|09|2022 – Available online 15|10|2022

Abstract

This study aimed to reveal the impact of artificial intelligence applications for administrative leaders in the development of human capital in the Ministry of Education in the Sultanate of Oman from their point of view. The leaders themselves considered, and the tool consisted of (29) items distributed on two scales: the Artificial Intelligence Applications Scale (13) items, and the Human Capital Development Scale (16) items. The study sample members were chosen by stratified random method, where the study sample consisted of (290) leaders from the administrative leaders representing the directors of the departments and their assistants and the administrative and technical supervisors in the ministry and in all the directorates of the department. Educational governorates in the Sultanate of Oman. The results of the study showed that the degree of administrative leaders' application of artificial intelligence applications was medium for the axes of (user behavior) and (availability of experts), and large for the axes of (system capacity) and (training and development), and that the degree of administrative leaders' practice of human capital development was (medium). The results also showed a direct (weak) positive impact of artificial intelligence applications on the development of human capital among the administrative leaders of the Ministry of Education in the Sultanate of Oman.

Keywords: artificial intelligence applications, Administrative Leadership, Human Capital Development.

الملخص

هدفت هذه الدراسة للكشف عن أثر تطبيقات الذكاء الاصطناعي للقيادات الإدارية في تنمية رأس المال البشري في وزارة التربية والتعليم بسلطنة عمان من وجهة نظرهم، وقد استخدم الباحث فيها المنهج الوصفي التنبؤي، حيث تم بناء استبانة لمعرفة أثر تطبيقات الذكاء الاصطناعي في تنمية رأس المال البشري من وجهة نظر القيادات أنفسهم، وتكونت الأداة النهائية من (29) فقرة، موزعة على مقياسين هما: مقياس تطبيقات الذكاء الاصطناعي (13) فقرة، ومقياس تنمية رأس المال البشري (16) فقرة. وقد تم اختيار أفراد عينة الدراسة بالطريقة العشوائية الطبقية، حيث تألفت عينة الدراسة من (290) قائداً من القيادات الإدارية يمثلون مديري الدوائر ومساعديهم والمشرفين الإداريين والفنيين بالوزارة وبجميع مديريات المحافظات التعليمية بسلطنة عمان. وقد أظهرت نتائج الدراسة أن درجة تطبيق القيادات الإدارية لتطبيقات الذكاء الاصطناعي جاءت متوسطة لمحوريّ (سلوك المستخدم) و (توفر الخبراء)، وكبيرة لمحوريّ (قدرة Nidam)، و(التدريب والتطوير)، وأن درجة ممارسة القيادات الإدارية لتنمية رأس المال البشري جاءت (متوسطة) في جميع محاورها. كما أظهرت النتائج وجود تأثير إيجابي مباشر (ضعيف) لتطبيقات الذكاء الاصطناعي على تنمية رأس المال البشري لدى القيادات الإدارية بوزارة التربية والتعليم بسلطنة عمان.

الكلمات المفتاحية: تطبيقات الذكاء الاصطناعي، القيادات الإدارية، تنمية رأس المال البشري.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

المقدمة:

في خضم تداعيات الثورة الصناعية الرابعة وما أفرزته من تنامٍ كبير لتطبيقات الذكاء الاصطناعي في خدمة البشرية، يبرز لنا قطاع استثمار رأس المال البشري كبديلٍ لاستثمار رأس المال الماديّ بالمنظمات، فالذكاء الاصطناعي هو تمثيل للمعرفة عبر طاقاتٍ بشريةٍ إبداعيةٍ وابتكاريةٍ، وما نشهده اليوم من ابتكارات للروبوتات وإنترنت الأشياء والنظم الخبيرة وشبكات التخزين السحابية وتطويعها لخدمة الإنسان لهي دليل على تسارع هذه التقانات، مما يستدعي مواكبة تطورها، إلا أن التخوف لا يزال حاضراً من إحلال الآلة محل الإنسان وبالتالي التعرض لفقد العديد من الوظائف الحالية. فالذكاء الاصطناعي هو شكل خاص من أشكال موارد التكنولوجيا المعلوماتية مع ميزاتٍ هجينةٍ لأعمال تقنية المعلومات ورأس المال البشريّ (Plastino & Purdy, 2017). ولقد خلقت تطورات الذكاء الاصطناعيّ ثورةً هائلةً في طبيعة عمل العنصر البشريّ، كما أسهمت في استحداث مهاراتٍ حديثةٍ غير معهودةٍ بالثورة الصناعية الرابعة، مما يستدعي إكساب العاملين مهاراتٍ تتناسب والتحول الرقميّ، فتكوين رأس المال البشريّ بالثورة الصناعية بحاجةٍ لتنشيطٍ بحثيٍّ لتعزيز التوظيف الحاليّ والمستقبليّ للباحثين وللقيادات الإدارية والفنية والأكاديمية (Atiku, 2020). ويؤمن الباحث أن أبرز معوقات تقدم تطبيق الذكاء الاصطناعي بسلطنة عمان بصفةٍ عامةٍ وبوزارة التربية والتعليم خاصةً هو عدم وجود جهةٍ رسميةٍ مركزيةٍ بالقطاع الحكوميّ تتبنى رؤية تطبيق الذكاء الاصطناعيّ. ويشكل ضعف إعداد القيادات الإدارية بالمنظمات التعليمية بسلطنة عمان تحدياً بارزاً تجاه تطور هذه المنظمات ومنها وزارة التربية والتعليم، إضافة لافتقاد التوجه الحثيث للاستفادة من الدراسات المرتبطة بهذا الموضوع، مما يستدعي تطبيق أنظمةٍ ابتكارية وحديثة لضمان برامج جودة التعليم بالشكل الذي يحقق بناءً جيداً لمنظومة التعليم بسلطنة عمان (Nabhani، 2015). ومما يدعم ذلك ما أوصت به الحبسية (2012) من أهمية استقطاب كوادر بشرية يمتلكون خصائص صنّاع المعرفة للإسهام في اتخاذ قراراتٍ مناسبةٍ للتحديات التي تواجهها وزارة التربية والتعليم بسلطنة عمان. كما أشارت دراسة (Al-Ghassini.2020) أن تطبيق استراتيجية التمكين في تنمية رأس المال الفكري بشقيه الهيكلي والبشري بوزارة التربية والتعليم بسلطنة عمان جاء متوسطاً، وأوصت بأهمية تمكين رأس المال البشري في استخلاص معارفه الضمنية وقدراته ومهاراته الابتكارية سعياً للتطوير ومراجعة السياسات التربوية وقوانينها التي تعيق إبداع رأس المال البشري. أما دراسة rishish (2015) فقد أظهرت أن تنمية رأس المال البشري يطبق بمستوى متوسطٍ في معظم محاوره بالمنظومة التعليمية، وأوصت بتمكين رأس المال البشري بوزارة التربية والتعليم في مشاركة اتخاذ القرارات وعمليات التطوير.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

مشكلة الدراسة:

عرضت العديد من الدراسات البحثية خلال السنوات المنصرمة قضية تطور الذكاء الاصطناعيّ والمعرفة التنظيمية الكامنة في رأس المال البشريّ للمنظمة كأصلٍ اقتصاديّ لها؛ إذ قد يؤدي الذكاء الاصطناعيّ لعدم المساواة في الأجور وتهميش رأس المال البشريّ الذي لا يبرع في المهارات البرمجية، مما سيؤثر نفسياً على مستقبل العمالة (AJSAM & Nidam، 2019). ولا شك أن قيادات الموارد البشرية مطالبون بخلق توازنٍ وظيفيٍّ والمزيد من الفرص بحلول عشرينيات القرن الحاليّ؛ نظراً لتغير مشهد رأس المال البشريّ وزيادة التعاون بين العنصر البشريّ والآلات واستيعاب هذا التعاون الجديد، وتركز الوظائف في المجال التقنيّ فقط كما أشار لذلك كل من (Anderson & Lee, 2018). وقد خلصت نتائج تحليل المقابلات التي قام بها (Al-Ghassini، 2016) في دراسته الاستطلاعية للكشف عن دور وزارة التربية والتعليم بسلطنة عمان في إدارة رأس المال الفكريّ لوجود قصور في إدارة رأس المال الفكري والذي يتضمن ضعف أداء القيادات الإدارية في مستوى مشاركة رأس المال البشريّ في اتخاذ القرارات، وضيق أفق فرص الابتكار والإبداع المتاحة لرأس المال البشريّ، إضافةً لضعف استغلال معطيات الثورة الصناعية الرابعة في تنمية رأس المال البشريّ بوزارة التربية والتعليم. مما حدا بمجموعة من الموظفين لتقديم استقالتهم من الوزارة بمعدلاتٍ متناميةٍ بلغت (1832) مستقيلاً خلال العام 2018 وقفز هذا العدد إلى (2370) مستقيلاً بالعام 2019 وعدد (3189) مستقيلاً العام 2020 (قسم سجلات الموظفين بوزارة التربية والتعليم، يناير 2020). واستناداً للدراسات العمانية التي تناولت تنمية رأس المال البشري كدراسة الحبسية (2012) (2015: Al-rakshia) (2015 :Al- Nabhania) و-Al Ghassini (2016) وAl-Ghassini (2020) والتي استخلص الباحث منها أن التقدم التكنولوجيّ والذكاء الاصطناعيّ في القيادات الإدارية بوزارة التربية والتعليم يعاني ضعفاً أكاديمياً وبحثياً أسهم في ضعف تنمية رأس المال البشريّ وقلة مهاراته، وبالتالي تصبح جودة القرارات غير فعالةٍ أحياناً؛ تجلّت مشكلة هذا البحث والتي تمثلت في السؤال الرئيس التالي: ما أثر تطبيقات الذكاء الاصطناعي في تنمية رأس المال البشري بوزارة التربية والتعليم بسلطنة عمان؟

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

أسئلة الدراسة:

1- ما درجة ممارسة القيادات الإدارية لتطبيقات الذكاء الاصطناعي بوزارة التربية والتعليم؟

2- ما درجة تطبيق القيادات الإدارية لتنمية رأس المال البشري بوزارة التربية والتعليم؟

3- ما أثر تطبيقات الذكاء الاصطناعي على تنمية رأس المال البشري لدى القيادات الإدارية بوزارة التربية والتعليم؟

أهداف الدراسة:

1- تحديد نوع درجة ممارسة القيادات الإدارية لتطبيقات الذكاء الاصطناعي.

2- قياس مستوى تطبيق القيادات الإدارية لتنمية رأس المال البشري.

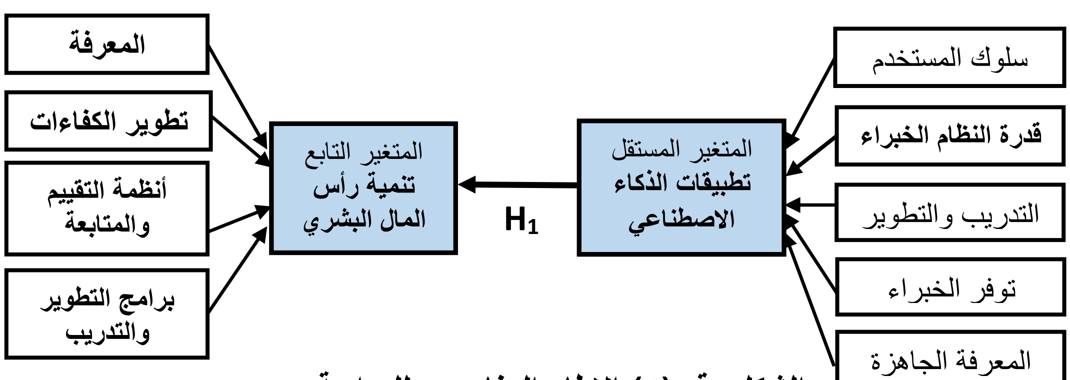
3- استكشاف أثر تطبيقات الذكاء الاصطناعي على تنمية رأس المال البشري لدى القيادات الإدارية بوزارة التربية والتعليم.

فرضية الدراسة:

- يوجد تأثير إيجابي مباشر لتطبيقات الذكاء الاصطناعي على تنمية رأس المال البشري لدى القيادات الإدارية بوزارة التربية والتعليم.

الإطار المفاهيمي للدراسة:

يوضح الشكل التالي شكل رقم (1) الإطار المفاهيمي للدراسة الحالية:



الشكل رقم (1) الإطار المفاهيمي للدراسة

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

مصطلحات الدراسة:

- **تطبيقات الذكاء الاصطناعي**: يعرف الباحث تطبيقات الذكاء الاصطناعي إجرائياً بأنها تطبيقاتٌ نموذجيةٌ آليةٌ لتمثيل المعرفة، والتي تتسم بقدرتها على مجاراة الذكاء البشريّ ومحاكاة السلوك الإنسانيّ وفهم طبيعته والقيام بأعماله إضافة للاستدلال الفعليّ والإصلاح الذاتيّ.
- **القيادات الإدارية**: يعرفها الباحث إجرائياً بأنها مجموعة من الأفراد الذين يتّسمون بمهارات قيادية تمكنهم من جودة التخطيط واتخاذ القرارات ومتابعة المرؤوسين وتوجيههم إيجابياً في سبيل تحقيق ميزة تنافسية للمنظمة.
- **تنمية رأس المال البشري**: يعرف الباحث تنمية رأس المال البشري إجرائيا بأنها الاستثمار الفعلي للسمات الشخصية التي يمتلكها أفراد المؤسسة؛ كالذكاء والمهارات والقدرات وإذكاء روح الابتكار من خلال إتاحة الفرص وخلق بيئة عمل إبداعية تسهم في تحقيق رؤية هذه المؤسسة وتطلعاتها.

الإطار النظري والدراسات السابقة:

مع التطور التقني والتسارع المعرفي اكتسب مفهوم الذكاء الاصطناعي تطوراً ملحوظاً عبر مراحله التاريخية، وبالرغم من تعدد مفاهيمه إلا أن أوجه الربط بين جميع المفاهيم لا تخرج عن إطار محاكاة الآلة للسلوك البشريّ لتوفير الجهد والوقت والكلفة وقدرة الآلة على اتخاذ قرارات تتسم بالجودة وفق المعرفة الجاهزة والكامنة بهذه الآلات، مع استشراف تمكين الذكاء الاصطناعيّ من عمليات دعم القرار. ويوضح الشكل رقم (2) التالي مراحل تطور الذكاء الاصطناعي:



الشكل (2) مراحل تطور مفهوم الذكاء الاصطناعي

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

تحديات الذكاء الاصطناعي

مع ازدياد رقعة التطور التقنيّ وانتشاره بالعالم أجمع بصورةٍ سريعةٍ، لا يزال خبراء استشراف المستقبل يؤكدون على ظهور تأثيراتٍ مباشرةٍ وغير مباشرةٍ نتيجة اتساع برمجيات وتطبيقات الذكاء الاصطناعيّ ومنها:

- صعوبة ضمان إنشاء آلاتٍ وروبوتاتٍ آمنةٍ وموثوقةٍ.
- سيطرة الشركات العملاقة على الشركات المتوسطة والصغيرة في القوّة الإنتاجية.
- قابلية تغير أو اندثار بعض القيم الإنسانية.
- إحلال تطبيقات الذكاء الاصطناعيّ محل العنصر البشريّ في التوظيف.
- زيادة المنصات والأسواق الإلكترونية والتي تزعزع عالم العمال.
- التوجه الوظيفيّ لاستيعاب رأس المال البشريّ المبدع والمبتكر والمنتج فقط.
- صعوبة خلق تفاعلٍ فاعلٍ بين تطبيقات الذكاء الاصطناعيّ نفسها.

نظرية العقل (ديفيد بريماك وكي وودروف 1978):

يربط بعض الخبراء نظرية العقل بالذكاء الاصطناعي، ويستندون في ذلك لتوافقهما في عمليات الاستنتاج المعرفيّ والتمثيل المعرفيّ، واستيعاب قدرة الفهم والتحليل الكميّ والنوعيّ للبيانات والمعلومات، حيث تفسر هذه النظرية السلوكيات الناجمة عن الأفراد بأنها نتاجٌ للتخمينات التي يقررها العقل البشريّ والذكاء الإنسانيّ والتي ترتبط أيضاً بالذكاء العاطفيّ، وقياساً عليها في تطبيقات الذكاء الاصطناعيّ فهي ترتبط بها عبر عمليات وقدرات ومهارات الفهم والتحليل وتحكيم المنطق الرياضيّ لاقتراح القرار الأمثل (Atum، 2020). وفي السياق نفسه يرى الشخص وصالح في أسامة (2017) أن نظرية العقل تتمثل في القدرات الجوهرية التي اختصها الله تعالى للبشر دون غيرهم من المخلوقات، والتي تتمثل في سلوكياتهم وتصرفاتهم الناتجة عن تفاعلهم وتأثيرهم وتأثرهم بالبيئة المحيطة، وهي نظريةٌ تختص بإظهار القدرات والتصورات الذهنية بشكلٍ كاملٍ، كالقدرات اللغوية والقدرات المعرفية والقدرات الاجتماعية الانفعالية.

ووفقاً لديفيد بريماك وغاي وودروف فقد حددا أبعاد هذه النظرية ضمنياً في أربعة أبعاد هي:

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

1- سلوك الفرد المستخدم.
2- المعرفة الكامنة.
3- قدرة الفرد على التنبؤ بسلوك الآخرين.
4- قدرة تطوير الNidam الاستدلالي. (Al-Imam & Al- Gawahda، 2010).

نظرية أنماط التعلم (ديفيد كولب 1984):

تقر هذه النظرية تفضيل الطلبة لأنماطٍ وطرق تعلّمٍ معينةٍ على طرق أخرى؛ تبعاً لطبيعة هؤلاء الطلبة، فمنهم الحركيّ والبصريّ والذي يفضل التعلم الذاتيّ، ومنهم من يميل للتعلم التعاونيّ، ومنهم الماهرون باللغة أو الموسيقى تبعاً للذكاءات المتعددة التي يتمتعون بها، وهناك من يشكك في هذه النظرية نظراً لتقييدها حريات التفكير الإبداعي في عمليتّي التعليم والتعلم، بحيث تصنف كلّ طالبٍ لنمطٍ واحدٍ فقط من المتعلمين يعتمد على طريقةٍ واحدةٍ ونموذجٍ واحدٍ في طريقة تعلمه (Libby, & Hicks, 2015).

ويتفق الباحث مع هذه النظرية في كون كل شخصٍ قد يتفرد بطريقةٍ خاصةٍ تميزه عن غيره في تلقيه للمعلومات وفهمه لها وتحليلها وطريقة استيعابها، وفي المقابل يختلف مع أبعادها التطبيقية في آلية تعميمها على كل الأفراد؛ فالملاحظ أن الأفراد بشكل عام لا نلحظهم يتعلمون بشكل أفضل دائماً في حال اختيارهم لنمط تعلّم معينٍ يفضلونه، وعلى النقيض تماماً فربما لم تتح لهم فرصة تجريب أنماطٍ أخرى قد تثري معلوماتهم ومداركهم. فالفطرة البشرية جُبِلت على الاستكشاف وتعلم أنماطٍ حديثةٍ ولولا ذلك لما تطورت الأنماط ولما لاقت قبولاً ورواجاً بتجدد الزمن وتطور العلم.

نظرية رأس المال البشري (شولتز 1960):

اعتمد شولتز نظرية رأس المال البشري عام 1960على ثلاثة فروض رئيسية أثناء بنائه مفهوم رأس المال البشري، وحصل في إثرها على جائزة نوبل عام 1979م، حيث ركز فيها على تعليم رأس المال البشري، وهذه الفروض كالتالي:

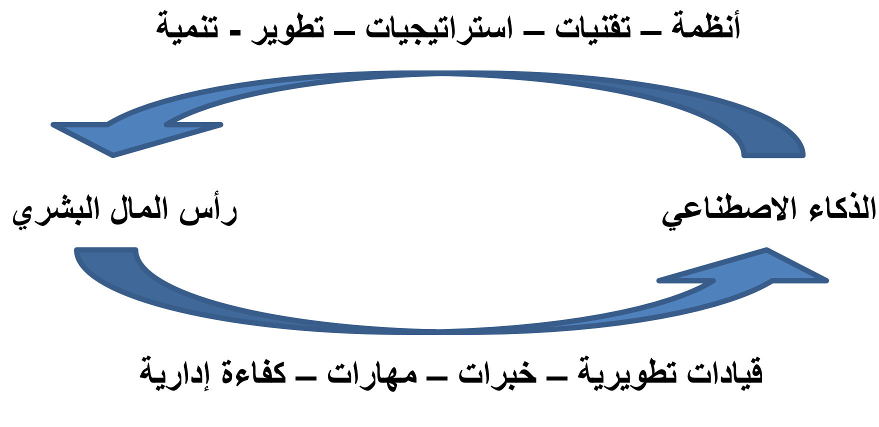
- فرضية النمو الاقتصادي وعدم إمكانية تفسيره بزيادة المدخلات المادية، وذلك بسبب تراكم المخزون الكمي لرأس المال البشري.
- بمعرفة الاختلافات في مقدار استثمار رأس المال البشري لأفراده فإنه يمكننا تفسير مدى الاختلافات في الإيرادات.

- كلما زادت نسبة رأس المال البشري مقارنة برأس المال التقليدي فإنه يمكننا تحقيق العدالة في الدخل من خلال استمرار هذه الزيادة (Dahan، 2010).

العلاقة بين تطبيقات الذكاء الاصطناعي وتنمية رأس المال البشري

لا شك أن الذكاء الاصطناعي بما يحويه من تقدم في طرق التشغيل الآليّ وعلم الروبوتات له أثر إيجابي على الإنتاجية، فهو يسعى لإعادة هندسة رأس المال البشريّ بشكل خلّاق. لكن تأثيره سيكون بحاجةٍ لتطوير القوانين وجاهزية رأس المال وتغييرات سوق العمل وفقدان العديد من الوظائف وزيادة معدل البطالة (Nidam، 2019).

ولا نجانب الحقيقة إن أقررنا بسير نجاح السياسة التعليمية بسلطنة عمان في السعي للتركيز على تنمية رأس المال البشري من خلال التدريب المستمر والتوسع في قطاعات التعليم وتطوير المناهج الدراسية وبناء مجتمع معرفي، إلا أن هذا النجاح لا يزال يواجه تحديات عدة في خضم التطلعات المستقبلية للتعلم الذكيّ وتقليص فرص الوظائف (السيد والمشيخي، 2018). ويرى الباحث أن إنتاجية رأس المال البشري هي من أهم المرتكزات الرئيسة للحفاظ على أي منظمة ناجحة ومستمرة العطاء، فالذكاء الاصطناعي وتعدد تقنياته واستشراف مستقبله هو في الأصل قائم على وجود رأس مال بشري ذو كفاءة ومهارة وخبرة ومعرفة ضمنية، ويلخص الباحث علاقة تطبيقات الذكاء الاصطناعي برأس المال البشري كما بالشكل رقم (3) التالي:



الشكل رقم (3) *علاقة تطبيقات الذكاء الاصطناعي برأس المال البشري*

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

الدراسات السابقة:

هدفت دراسة (Popkova, Serge (2020 لدراسة رأس المال البشري والذكاء الاصطناعي التقارب والاختلاف في ريادة الأعمال الاجتماعية بروسيا للكشف عن مدى التقارب (الاستخدام المتزامن خلال نفس عمليات تنظيم المشاريع مع التركيز على الميزات الفريدة بشروط المنافسة) أو الاختلاف (الاستخدام أثناء العمليات التجارية المختلفة حسب شروط تقسيم العمل)، واستخدم الباحث المنهج الوصفي الاستقصائي، وتوصلت الدراسة أن ريادة الأعمال الاجتماعية سوف تستغل فرص الصناعة لتحسين أنشطتها حتى عام 2030 ولكنها قد ترفض الأتمتة الكاملة باستخدام الذكاء البشري والذكاء الاصطناعي في نفس الوقت، وأوصت الدراسة بتنمية الاتجاهات الأكثر منظورا لتطبيق الذكاء الاصطناعي ومنها تنمية رأس المال البشري.

وتمحورت دراسة (2019Ajsam& Nidam) حول تأثير الذكاء الاصطناعي على إدارة رأس المال البشري في ماليزيا، وهل يمكن أن يؤثر ذلك إيجابياً على القدرة التنافسية؟ وتكونت عينة البحث من مديري الموارد البشرية ومديري التوظيف المباشر بماليزيا، ووظف الباحثان المنهج التفسيري والمنهج الوصفي التحليلي، واستهدف البحث (260) قيادياً منهم، وأظهرت الدراسة أن الذكاء الاصطناعي لا يزال في بداياته وأنه من خلال تطبيق الذكاء الاصطناعي ستزيد كفاءة إنتاجية رأس المال البشري في إطار إدارة المعرفة، وأن التعلم عن طريق الذكاء الاصطناعي يؤثر إيجابًا على إدارة رأس المال البشريّ، وأن مهارات رأس المال البشري والقدرة المعرفية تشكل عامل تمكين قوي لدعم عملية الانتقال للتقدم، وإذا تم إهمال ذلك فقد يشكل تهديداً للأمن الوظيفي لرأس المال البشري، وأن التنبؤ بتأثير الذكاء الاصطناعي على قلة فرص العمل لا يزال غير واضح ويصعب التكهن به، إلا أن دعم الذكاء الاصطناعي للتعلم العميق من خلال عملية الموارد البشرية المحسنة وذات الكفاءة لها تأثير مباشر على جودة توظيف رأس المال البشري.

واستقصت دراسة (Jatooba, Santosa & Gutierriza (2019 تطور أبحاث الذكاء الاصطناعي في الموارد البشرية التحقيق في تطور تطبيقات الذكاء الاصطناعي في مجال الموارد البشرية، واستخدم الباحث منهج التحليل الوصفي الكمي، وتكونت العينة من أبحاث المجلات في مكتبة قاعدة المعرفة بين عامي (2000- 2018) وعددها (32) إصداراً تناولت بحوث تطبيق الذكاء الاصطناعي وأثرها على الموارد البشرية، وأظهرت الدراسة قلة أبحاث الذكاء الاصطناعي في مجال الموارد البشرية ورأس المال البشري، وأن هناك حاجة لدراسات مستقبلية تتناول تأثير الذكاء الاصطناعي على تنمية الموارد البشرية، وأوصت الدراسة بتكثيف الأبحاث حول موضوع الدراسة.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

وعنيت دراسة Yawalkar (2019) بدراسة أثر الذكاء الاصطناعي على إدارة الموارد البشرية بدراسة دور الذكاء الاصطناعي في قسم الموارد البشرية وفهم التحديات التي يواجهها قياديو هذا القسم، واعتمد الباحث المنهج الوصفي، واستخدم أداة الاستبانة لجمع بيانات من أوراق بحثية ومواقع إلكترونية ومدونات، وخلصت الدراسة البحثية إلى أن دور الذكاء الاصطناعي أكبر في وظائف مختلفة يتم تنفيذها في قسم الموارد البشرية، حيث يمكن لشركات الروبوتات التعامل معها بتوظيف وتحليل البيانات وجمعها وتقليل عبء العمل في مكان العمل، وأوصت بعمل ملف يعنى باستخدام أدوات الذكاء الاصطناعي والتقنيات الرقمي، واستنتجت أن الذكاء الاصطناعي يلعب دوراً أساسياً في التوظيف والاختيار وتحليل الأداء وجمع البيانات المتعلقة بالموظفين.

منهج الدراسة:

اعتمدت الدراسة المنهج الوصفي (التنبؤي)، لملاءمة هذا المنهج لطبيعة الدراسة الحالية، وهو منهج يستند على دراسة إحدى الظواهر (ظاهرة تنامي عدد الاستقالات مع تطور تطبيقات الذكاء الاصطناعي) عبر تجميع البيانات المتعلقة بالدراسة، ومن ثم الوصول إلى النتائج التي تقوم بدورها بتطوير نموذج الدراسة من خلال التنبؤ واستشراف المستقبل.

مجتمع الدراسة:

تكون مجتمع الدراسة الكلي من (1190) قائداً يمثلون جميع القيادات الإدارية بالوزارة والمديريات التعليمية المثبتون وممن هم على رأس العمل للعام الدراسي 2021/2020م، وبلغ حجم عينة الدراسة (290) قائداً ممثلين لخصائص المجتمع.

أداة الدراسة:

لتحقيق هدف الدراسة قام الباحث بتطوير استبانة أثر إدارة المعرفة للقيادات الإدارية في تنمية رأس المال البشري استناداً إلى الأدب التربوي والدراسات السابقة، وتكونت الأداة في صيغتها الأولية (38) فقرة موزعة على مجالي مقياس تطبيقات الذكاء الاصطناعي ومقياس تنمية رأس المال البشري، وقد تم استخراج دلالات الصدق والثبات لأداة الدراسة على النحو التالي:

أولاً: صدق الأداة

تم التحقق من الصدق الظاهري للاستبانة وصدق المحتوى عبر عرضها على (11) محكّماً من ذوي الاختصاص والخبرة والكفاءة من جامعة السلطان قابوس وجامعة عين شمس وجامعة نزوى وجامعة الشرقية ومسؤولين بوزارة التربية والتعليم بسلطنة عمان، وبناء على ملاحظات المحكمين تم حذف فقرتين ليصبح مجموع فقرات الاستبانة (36) فقرة موزعة كما يلي: (20) فقرة بمقياس تطبيقات الذكاء الاصطناعي و (16) فقرة بمقياس تنمية رأس المال البشري. وقد تم اعتماد مقياس ليكرت الخماسي لتصحيح أداة الدراسة كما يلي: (كبيرة جداً، كبيرة، متوسطة، قليلة، قليلة جداً) وهي تمثل رقمياً (5و4و3و2و1) على الترتيب.

كما تم التأكد من صدق البناء لكل مقياس بالأداة، حيث استخرجت معاملات ارتباط الفقرات لكل محور مع الدرجة الكلية للمحور الذي تنتمي إليه في عينة استطلاعية بلغت (60) قائداً من خارج عينة الدراسة، وقد تراوحت معاملات ارتباط الفقرات مع البعد الذي تنتمي إليه ما بين (0,490-0,708) في مقياس تطبيقات الذكاء الاصطناعي كما بالجدول التالي رقم (1):

الجدول رقم (1): *معاملات الارتباط بين الفقرات والبعد الذي تنتمي إليه لمتغير تطبيقات الذكاء الاصطناعي*

البعد الأول: سلوك المستخدم		البعد الثاني: قدرة الNidam		البعد الثالث: التدريب والتطوير		البعد الرابع: توفر الخبراء		البعد الخامس: المعرفة الجاهزة	
الفقرة	الارتباط	الفقرة	الارتباط	الفقرة	الارتباط	الفقرة	الارتباط	الفقرة	الارتباط
1	.556**	5	.533**	9	.493**	13	.699**	16	.490**
2	.708**	6	.539**	10	.506**	14	.640**	17	.575**
3	.607**	7	.592**	11	.614**	15	.643**	18	.493**
4	.650**	8	.637**	12	.584**			19	.609**
								20	.556**

** دالة إحصائيا عند مستوى الدلالة (0.01). * دالة إحصائيا عند مستوى الدلالة (0.05).

وقد تراوحت معاملات ارتباط الفقرات مع البعد الذي تنتمي إليه ما بين (0,424-0,744) في مقياس تنمية رأس المال البشري كما بالجدول التالي رقم (2).

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

الجدول رقم (2): معاملات الارتباط بين الفقرات والبعد الذي تنتمي إليه لمتغير تنمية رأس المال البشري

البعد الأول: المعرفة		البعد الثاني: تطوير الكفاءات		البعد الثالث: أنظمة التقييم والمتابعة		البعد الرابع: برامج التطوير والتدريب	
الفقرة	الارتباط	الفقرة	الارتباط	الفقرة	الارتباط	الفقرة	الارتباط
1	.517**	5	.511**	9	.562**	13	.642**
2	.696**	6	.676**	10	.744**	14	.424**
3	.714**	7	.475**	11	.458**	15	.652**
4	.518**	8	.542**	12	.640**	16	.644**

** دالة إحصائيا عند مستوى الدلالة (0.01). * دالة إحصائيا عند مستوى الدلالة (0.05).

يتضح من الجدول رقم (1) والجدول رقم (2) أن جميع قيم معاملات ارتباط الفقرات مع البُعد الذي تنتمي إليه كانت ذات درجات متفاوتة بين المتوسطة والعالية، وجميعها دالة إحصائيا، ولا توجد فقرة ذات ارتباط سالب أو يقل ارتباطها عن القيمة (0.15) وعليه فقد اعتمد الباحث جميع فقرات المقياسين.

ثانياً: ثبات أداة الدراسة

للتأكد من ثبات أداة الدراسة، تم التحقق بطريقة الاختبار وإعادة الاختبار (test-retest) بتطبيق الاستبانة، وإعادة تطبيقها بعد أسبوعين على عينة من خارج عينة الدراسة تكونت من (60) قائداً، ومن ثم تم حساب معامل الثبات لكل مقياس حسب معادلة كرونباخ ألفا بواسطة برنامج (SPSS)، واعتبرت هذه القيم ملائمة لغايات هذه الدراسة.

الجدول رقم (3): معاملات الثبات بمعادلة كرونباخ ألفا والدرجة الكلية لمقاييس الدراسة

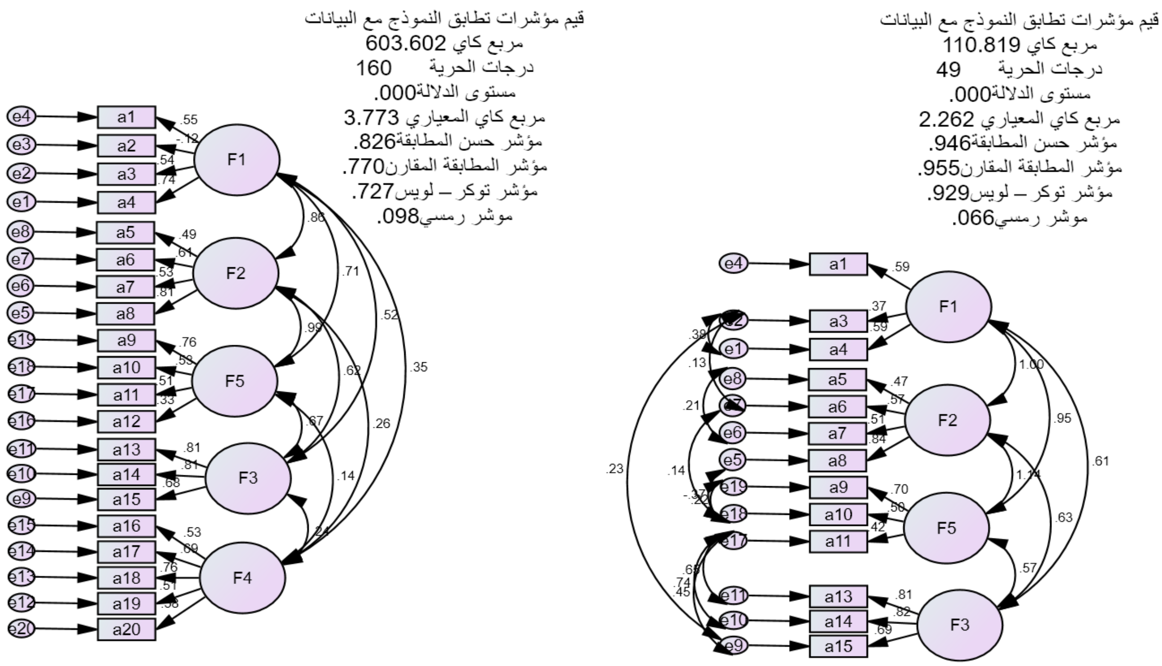
المقياس	معامل الثبات بعد إعادة الاختبار
تطبيقات الذكاء الاصناعي	0,730
تنمية رأس المال البشري	0,849

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

المعالجات الإحصائية:

للإجابة عن أسئلة الدراسة واختبار صحة فَرَضِيّاتها ولتحقيق أهدافها وتحليل البيانات التي سيتم جمعها، تم استخدام أساليب الإحصاء الوصفي والتحليلي المناسبة والمعتمدة على مقاييس الإحصاء الوصفية (المتوسطات الحسابية والانحرافات المعيارية) باستخدام برنامج الحزمة الإحصائيّة للعلوم الاجتماعية (SPSS)، إضافة إلى تحليل نمذجة المعادلة الهيكلية (SEM) وتحليل المسار عبر برنامج (AMOS).

وللتأكد من صدق وثبات هذا أنموذج تطبيقات الذكاء الاصطناعي تم اللجوء للتحليل العاملي التوكيدي. ويوضح الشكل (4) التحليل العاملي التوكيدي الأولي والنهائي لأنموذج تطبيقات الذكاء الاصطناعي ما قبل التعديل وما بعد التعديل-أي ما بعد إخضاعه للمراجعة.



قبـــل التعديـــل

بعـــد التعديـــل

الشكل رقم (4) *أنموذج التحليل العاملي التوكيدي قبل وبعد التعديل لتطبيقات الذكاء الاصطناعي*

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

ويتضح من الشكل (4) أنه بعد إخضاع أنموذج تطبيقات الذكاء الاصطناعي بأبعاده الخمسة للتحليل العاملي التوكيدي للمراجعة؛ ومن خلال مؤشر التعديل (Modification Index)؛ ونظراً لأن مؤشرات حسن المطابقة أظهرت أن البيانات غير مطابقة للنموذج، فقد تم حذف العبارتين (2 و 12) والعبارات من (16 إلى 20) والتي تمثل بُعد (المعرفة الجاهزة)، وذلك لضعف ارتباطها بالمقياس، ويظهر الشكل الأيمن النموذج بعد التعديل أي بعد حذف العبارات، ويظهر فيه مطابقة البيانات للأنموذج، وبالتالي أصبح المقياس مكوناً من 13 فقرة في صورته النهائية.

نتائج الدراسة:

أولاً: النتائج المتعلقة بالسؤال الأول:

ما درجة ممارسة القيادات الإدارية لتطبيقات الذكاء الاصطناعي بوزارة التربية والتعليم؟

للإجابة على هذا السؤال تم استخراج المتوسطات الحسابية والانحرافات المعيارية لتقديرات عينة الدراسة حول درجة ممارسة القيادات الإدارية لتطبيقات الذكاء الاصطناعي بوزارة التربية والتعليم بسلطنة عمان ببرنامج (SPSS) كما بالجدول رقم (4):

الجدول رقم (4): المتوسطات الحسابية والانحرافات المعيارية لأبعاد تطبيقات الذكاء الاصطناعي

المحاور	حجم العينة	المتوسط الحسابي	درجة الموافقة	الانحراف المعياري
سلوك المستخدم	290	3.27	متوسطة	0.58
قدرة الNidam	290	3.78	كبيرة	0.65
التدريب والتطوير	290	3.75	كبيرة	0.68
توفر الخبراء	290	2.74	متوسطة	0.81

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

وتكشف قيم المتوسطات الحسابية الموضحة في الجدول رقم (4) أن درجة ممارسة القيادات الإدارية لأبعاد تطبيقات الذكاء الاصطناعي جاءت متوسطة في محوريّ (سلوك المستخدم) و (توفر الخبراء)، وكبيرةً في محوريّ (قدرة الNidam) و (التدريب والتطوير).

ويعزو الباحث هذه النتيجة والتي أظهرت توظيف القيادات الإدارية لتطبيقات الذكاء الاصطناعي بدرجة متوسطة في محوري سلوك المستخدم وتوفر الخبراء لمحدودية الخدمات الإلكترونية الحالية وعدم التوسع فيها، إضافة لوجود قصور في عملية التقييم المستمر للتطبيقات المستخدمة وتشخيص احتياجات المستخدمين والأخذ بملاحظاتهم، ويرى الباحث أن هذه النتيجة تزيد من مسؤولية الوزارة تجاه ضرورة بناء قاعدة بشرية مهيأة لمواكبة تطورات وتقنيات الذكاء الاصطناعي ومما يدلل على ذلك ما أكد عليه القادة الإداريون من ضعف استقطاب خبرات محلية وخارجية في الذكاء الاصطناعي وقلة الفرص المتاحة والممنوحة للموظفين للمشاركة في ملتقيات الذكاء الاصطناعي لغرض إكسابهم الخبرة وفق ما أظهره تحليل نتائج المستجيبين. أما محور قدرة الNidam والذي جاء بدرجة تطبيق كبيرة من لدن القيادات الإدارية فهو يدلل على القابلية الجاهزة لاستيعاب الجديد من التطبيقات الرقمية والذكية وشغف التعامل معها واستشراف تأثيرها الإيجابي، واتفقت هذه النتيجة مع دارسة (Popkova, Serge (2020 والتي أظهرت الحاجة لتنمية الاتجاهات الأكثر منظوراً لتطبيق الذكاء الاصطناعي ومنها رأس المال البشري.

ثانياً: النتائج المتعلقة بالسؤال الثاني:

ما درجة تطبيق القيادات الإدارية لتنمية رأس المال البشري بوزارة التربية والتعليم؟

وللإجابة على هذا السؤال تم استخراج المتوسطات الحسابية والانحرافات المعيارية لتقديرات عينة الدراسة حول درجة تطبيق القيادات الإدارية لتنمية رأس المال البشري بوزارة التربية والتعليم بسلطنة عمان عبر برنامج (SPSS) كما بالجدول رقم (5):

الجدول رقم (5): *المتوسطات الحسابية والانحرافات المعيارية لمقياس تنمية رأس المال البشري*

المحاور	حجم العينة	المتوسط الحسابي	درجة الموافقة	الانحراف المعياري
المعرفة	290	3.16	متوسطة	0.68

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

تطوير الكفاءات	290	2.79	متوسطة	0.79
التقييم والمتابعة	290	2.82	متوسطة	0.78
برامج التطوير والتدريب	290	2.93	متوسطة	0.70

وتشير قيم المتوسطات الحسابية الموضحة في الجدول (4-17) أن درجة تطبيق قيادات الموارد البشرية لمحاور تنمية رأس المال البشري جاءت متوسطة في جميع المحاور، وجاءت أعلى درجة تطبيق لمحور (المعرفة) بمتوسط (3.16)، وأقل درجة تطبيق لمحور (تطوير الكفاءات) بمتوسط (2.79). ويعزو الباحث هذه النتيجة لقلة إشاعة مصطلح تنمية رأس المال البشري بالوزارة، وأن موظفي الوزارة بحاجة لتحديث المعرفة بشكل ديناميكي يوازي التقدم السريع بالثورة الصناعية الرابعة والثورة المعلوماتية المتسارعة، وقد أبرزت هذه النتيجة أهمية السعي نحو الاهتمام بالكوادر الإدارية والفنية وما تمتلكه من خبرات ومهارات وضرورة تعزيزها وتحفيزها، الأمر الذي يستدعي من الوزارة الاهتمام بشكل أكبر بأصحاب المبادرات والأفكار التطويرية والتنموية، وإتاحة الفرصة لهم بالتدرج لتولي مناصب قيادية، والاهتمام بتشخيص مستوى المهارات التقنية للمقبلين على هذه الوظائف ومنهم الموظفين الجدد، وتوظيف أكبر للأنظمة الخبيرة وتطبيقات الذكاء الاصطناعي في جوانب التدريب وتنمية رأس المال البشري.

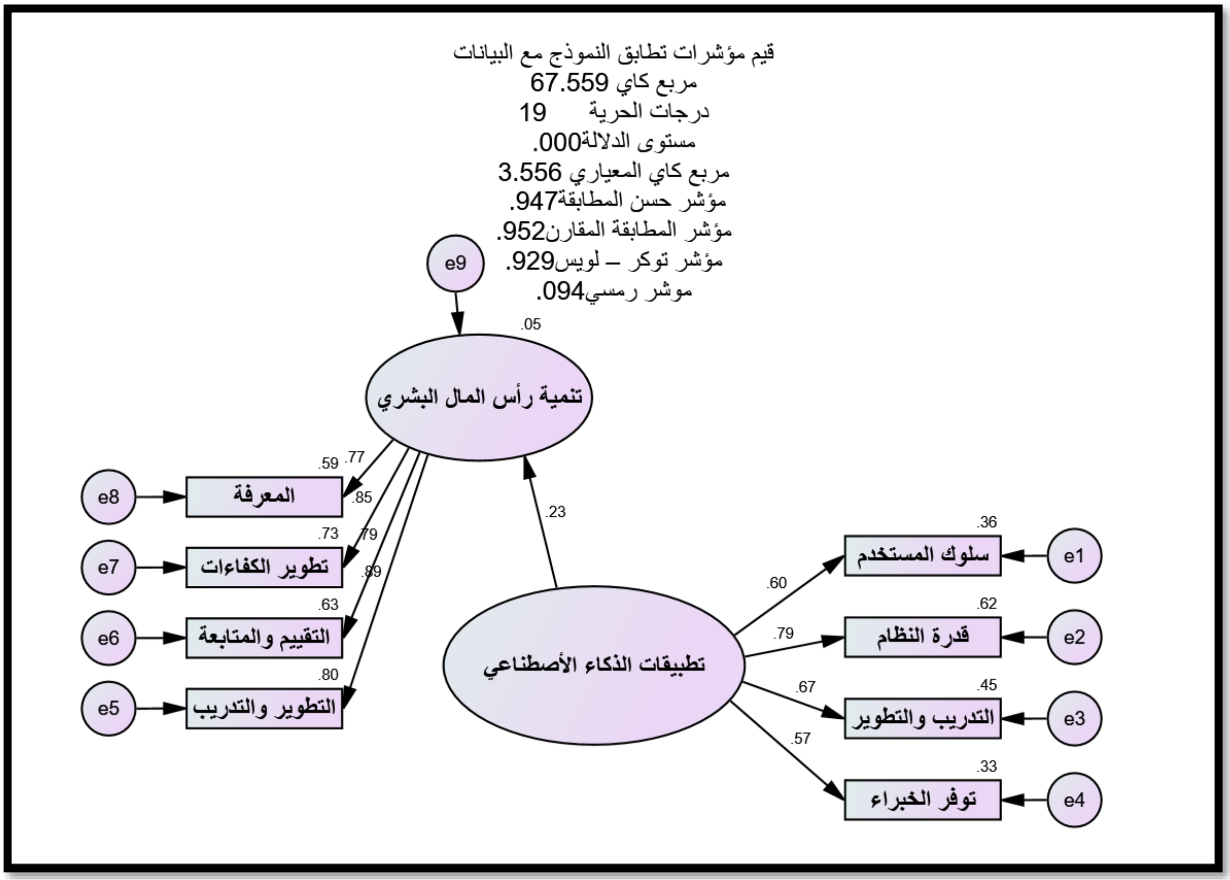
واتفقت هذه النتيجة مع دراسة Jatooba, Santosa & Gutierriza (2019) والتي أظهرت أن هنالك حاجة لدراسات مستقبلية تتناول تأثير تطبيقات الذكاء الاصطناعي على تنمية الموارد البشرية.

ثالثاً: النتائج المتعلقة بالسؤال الثالث:

ما أثر تطبيقات الذكاء الاصطناعي على تنمية رأس المال البشري لدى القيادات الإدارية بوزارة التربية والتعليم؟

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

وللكشف عن طبيعة تأثير تطبيقات الذكاء الاصطناعي على تنمية رأس المال البشري لقيادات الموارد البشرية وتحديد نوع التأثير إن وجد؛ استخدم الباحث تحليل المسار عبر نمذجة المعادلة الهيكلية ببرنامج AMOS في إيجاد النموذج البنائي للعلاقات بين تطبيقات الذكاء الاصطناعي كمتغير مستقل وتنمية رأس المال البشري كمتغير تابع كما بالشكل :(5)



الشكل رقم (5) النموذج البنائي للعلاقات بين تطبيقات الذكاء الاصطناعي كمتغير مستقل وتنمية رأس المال البشري كمتغير تابع

الجدول رقم (6) مؤشرات حسن مطابقة النموذج البنائي للعلاقات بين تطبيقات الذكاء الاصطناعي كمتغير مستقل وتنمية رأس المال البشري كمتغير تابع

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

مؤشر حسن المطابقة	الاسم	المدى المثالي للمؤشر	القيمة
χ^2	مربع كاي	p-value>0.05	Chi-square = 67.559 p-value=0.000<0.05
CMINDF	مربع كاي المعياري	CMINDF < 5	3.556
RMSEA	مؤشر رمسي	RMSEA < 0.08	0.094
GFI	مؤشر حسن المطابقة	GFI ≥ 0.95	0.947
AGFI	مؤشر حسن المطابقة المصحح	AGFI ≥ 0.95	0.905
NFI	مؤشر المطابقة المعياري	NFI ≥ 0.95	0.945
CFI	مؤشر المطابقة المقارن	CFI ≥ 90	0.952
TLI	مؤشر توكر – لويس	TLI ≥ 0.95	0.929

ويشير الجدول (6) إلى تحقيق النموذج البنائي للعلاقات بين تطبيقات الذكاء الاصطناعي كمتغير مستقل وتنمية رأس المال البشري كمتغير تابع لمؤشرات حسن المطابقة، حيث جاءت قيمة مربع كاي (67.559) وهي دالة إحصائياً عند مستوى دلالة (α=0.05)؛ وذلك بسبب حساسية مربع كاي لحجم العينة، لذلك اعتمد الباحث على نتيجة مربع كاي المعياري (CMINDF)، وقد جاءت قيمته مساوية (3.556)، وهذه النتيجة أقل من الحد الأعلى للمحك الذي اعتمده خبراء الإحصاء، كما أن قيمة مؤشر رمسي (0.094)، وهي أعلى قليلا من (0.08)، كما أن مؤشرات كلٍّ من: مؤشر حسن المطابقة ومؤشر المطابقة المعياري ومؤشر المطابقة المقارن ومؤشر توكر-لويس جاءت جميعها عالية ومحققة لحسن المطابقة كما هو موضح في الجدول أعلاه.

كما قام الباحث بحساب قيم معاملات الانحدار للمسارات السببية بالقيم المعيارية وغير المعيارية لتطبيقات الذكاء الاصطناعي وتنمية رأس المال البشري والجدول (7) يوضح ذلك كما يلي:

الجدول رقم (7) قيم معاملات الانحدار للمسارات السببية بالقيم المعيارية وغير المعيارية لتطبيقات الذكاء الاصطناعي وتنمية رأس المال البشري

المسار السببي	معاملات الانحدار غير المعيارية	معاملات الانحدار المعيارية	خطأ القياس	القيم الحرجة	قيمة الاحتمال	مربع الارتباط المتعدد
تطبيقات الذكاء الاصطناعي ← تنمية رأس المال البشري	0.241	0.226	0.076	3.152	*0.002	0.051
تطبيقات الذكاء الاصطناعي ← سلوك المستخدم	0.866	0.604	0.105	8.265	**0.000	0.365
تطبيقات الذكاء الاصطناعي ← قدرة الNidam	1	0.786				0.619
تطبيقات الذكاء الاصطناعي ←التدريب والتطوير	0.814	0.669	0.084	9.656	**0.000	0.447
تطبيقات الذكاء الاصطناعي ← توفر الخبراء	0.766	0.574	0.097	7.887	**0.000	0.329
تنمية رأس المال البشري ← التطوير والتدريب	0.929	0.895	0.049	18.784	**0.000	0.801
تنمية رأس المال البشري ← التقييم والمتابعة	0.92	0.791	0.058	15.904	**0.000	0.625

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

المسار السببي	معاملات الانحدار غير المعيارية	معاملات الانحدار المعيارية	خطأ القياس	القيم الحرجة	قيمة الاحتمال	مربع الارتباط المتعدد
تنمية رأس المال البشري ⟵ تطوير الكفاءات	1	0.853				0.728
تنمية رأس المال البشري ⟵ المعرفة	0.775	0.769	0.051	15.27	**0.000	0.592

*** دال عند مستوى دلالة (α=0.05)** **** دال عند مستوى دلالة (α=0.01)**

يوضح الجدول (7) معاملات الانحدار المعيارية وغير المعيارية والقيم الحرجة مع القيمة الاحتمالية للاختبارات (الدلالة الإحصائية)، من الجدول نستنتج أن تطبيقات الذكاء الاصطناعي جاءت معنوية من الناحية الإحصائية (عند مستوى معنوية $P \leq 0.05$)، وهي تشير إلى وجود تأثير إيجابي مباشر (0.226) لتطبيقات الذكاء الاصطناعي على تنمية رأس المال البشري، كما تظهر النتائج أيضا أن معاملات الانحدار المعيارية – درجة تشبع المحاور (سلوك المستخدم، قدرة الNidam، التدريب والتطوير، توفر الخبراء) بالمتغير المستقل (تطبيقات الذكاء الاصطناعي) – قد تراوحت بين (0.574 – 0.786)، كما أن معاملات الانحدار المعيارية– درجة تشبع المحاور (التطوير والتدريب، التقييم والمتابعة، تطوير الكفاءات، المعرفة) بالمتغير التابع (تنمية رأس المال البشري) – قد تراوحت بين (0.769 – 0.895)، وتشير قيم مربع الارتباط المتعدد أن (5.1%) من التباين الحاصل في تنمية رأس المال البشري تفسره تطبيقات الذكاء الاصطناعي، والنسبة المتبقية من التباين تفسره عوامل أخرى.

كما يوضح الجدول رقم (8) التأثير المباشر وغير المباشر والكلي لتطبيقات الذكاء الاصطناعي على تنمية رأس المال البشري كما يلي:

الجدول (8) *التأثير المباشر وغير المباشر والكلي لتطبيقات الذكاء الاصطناعي على تنمية رأس المال البشري*

محاور تنمية رأس المال البشري	تطبيقات الذكاء الاصطناعي	
	التأثير الكلي (غير مباشر)	**قيمة الاحتمال**

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

المعرفة	0.174	**0.008
تطوير الكفاءات	0.193	**0.009
التقييم والمتابعة	0.178	*0.011
التطوير والتدريب	0.202	**0.009

* دال عند مستوى دلالة (α=0.05) ** دال عند مستوى دلالة (α=0.01)

ويتضح من الجدول (8) وجود تأثير إيجابي ضعيف جداً وغير مباشر دال إحصائياً لتطبيقات الذكاء الاصطناعي على محاور تنمية رأس المال البشري (المعرفة، تطوير الكفاءات، التقييم والمتابعة، التطوير والتدريب)، وجاء أعلى تأثير لتطبيقات الذكاء الاصطناعي على محور التدريب والتطوير، وأقل تأثير على محور المعرفة. واتفقت هذه النتيجة مع دراسة كل من Ajsam & Nidam (2019) و Yawalkar (2019) واللتان أظهرتا أن التعلم عن طريق تطبيقات الذكاء الاصطناعي يؤثر إيجاباً على إدارة رأس المال البشري وأن التخوف من فقدان الوظائف المستقبلية بسبب إحلال تطبيقات وروبوتات الذكاء الاصطناعي لا يزال غامضاً وغير واضح، وأن هنالك دور كبير لتطبيقات الذكاء الاصطناعي على وظائف القيادات الإدارية في عمليات التوظيف والفرز وتحليل أداء الموظفين.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

التوصيات:

- نشر الثقافة الإلكترونية بالتعاملات الإدارية والمهام الإشرافية والمناهج التعليمية وقطاع التدريب الذكي.
- تهيئة البنية التحتية الرقمية لتفعيل أكبر لتطبيقات الذكاء الاصطناعي بما يتماشى ورؤية عمان 2040م والتي أولت هذا الجانب أولوية كبرى.
- إنشاء مدارس مستقبلية نموذجية وفق متطلبات تقنيات الذكاء الاصطناعي من حيث إعادة التفكير في التعليم في عصر التكنولوجيا وتمدين الثورة الرقمية بالمدارس المزمع إنشاؤها.
- تعزيز قدرات رأس المال البشري بالوزارة من أجل التفاعل المعرفي بين الإنسان والآلة في الحياة والتعلم والعمل.
- تمكين رأس المال البشري من توليد الأفكار الإبداعية عبر العصف الذهني ومشاركتهم قرارات الوزارة.

REFERENCES

Ajasam, Daniel; Nizam, Ismail (2019). The impact of artificial intelligence on human capital management in Malaysia. DOI: 10.24924/ijise/19.11.2009/v7. Version 2/10.35.

Al-Imam Muhammad; and Al- Jawaldeh, Fouad. (2010). Autism and Theory of Mind (I.1). House of Culture for Publishing and Distribution, Jordan.

Al-Ghasini, Mohammed (2020). *The degree of application of the empowerment strategy in the development of intellectual capital in the Ministry of Education in the Sultanate of Oman* (unpublished doctoral thesis). Malaysia International Islamic University.

Al-Ghasini, Muhammad (2016). *The role of the Ministry of Education in the Sultanate of Oman in managing intellectual capital* (unpublished master's thesis). Sultan Qaboos University, Sultanate of Oman.

Al Habsiah, Rayya (2012). *The role of knowledge management in developing the managerial skills of employees in the general directorates of education in the Sultanate of Oman* (unpublished master's thesis). University of Nizwa, Sultanate of Oman.

Al-Nabhania, Maryam (2015). *Developing the education system in the Sultanate of Oman: sustainable development and the market*. 12/13/2016 www.oea-oman.org.

Al-Raqishiya, Aisha (2015). *Dimensions of organizational learning and its relationship to human capital development among teachers of post-basic education schools in Al Dakhiliyah Governorate in the Sultanate of Oman* (unpublished master's thesis). University of Nizwa, Sultanate of Oman.

Alsayid, Abdul Qadir. and Sheikh Khalid (2018). *Education in the Sultanate of Oman and its future aspirations*. Banha: Banha university. Egypt.

Atiku, Sulaiman. O. (2020). *Human Capacity Building Through University-Industry Collaboration*. University-Industry Collaboration Strategies in the Digital Era. P: 321-336.

Atom, Batoul (2020). Theory of Mind in Artificial Intelligence. Available at https://e3arabi.com.

Dahan, Mohammed (2010). *Educational investment in human capital* (published Ph.D. thesis). University Mentouri Constantine, Algeria.

Jatooba, Santosa & Gutierriza (2019). *Develop artificial intelligence research in human resources*. Procedia Computer Science 164 (2019) 137–142. Portugal.

Libby, Kitty & Hicks, Kristen (2015). Does the theory of "learning styles" explain how our students learn? Available at https://note-mag.com/archives/5504.

Osama, Basma (2017). A program based on the theory of mental tasks to develop social interaction among children with mild mental disabilities and reduce their hyperactivity (unpublished doctoral thesis). Ain Shams University, Egypt.

Plastino, Eduardo & Purdy, Mark. (2017). *Strategy & Leadership Game changing value from Artificial Intelligence: eight strategies Article information*.46(1). p.16-22. DOI:10.1108/SL-11-2017-0106.

Popkova, Serge (2020). *The convergence of human capital and artificial intelligence and the difference in social entrepreneurship in Russia*. Russia.

Yawalkar. Vivek V (2019). *The impact of artificial intelligence on human resource management by studying the role of artificial intelligence in human resource management and understanding the challenges faced by the leaders of this department*. KCES's Institute of Management & Research. 6 (1).

JOURNAL OF HUMAN DEVELOPMENT AND EDUCATION FOR SPECIALIZED RESEARCH| VOL: 8 ISSUE:4 |October 2022

مجلة التنمية البشرية والتعليم للأبحاث التخصصية| المجلد 8 العدد 4 |تشرين الأول/ أكتوبر 2022

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

ESSESSMENT OF THE QUALITY LEVEL OF EDUCATIONAL TELEVISION PROGRAMS IN LIGHT OF QUARANTINE FROM THE POINT OF VIEW OF SUCCESSFUL STUDENTS IN THE BACCALAUREATE

Dr. Bakir Malika

تقييم مستوى جودة البرامج التلفزيونية التعليمية في ظل الحجر الصحي من وجهة نظر الطلبة الناجحين في البكالوريا

د.بكير مليكة

bakir.malika@cu-tipaza.dz

المركز الجامعي مرسلي عبد الله، تيبازة– معهد العلوم الاجتماعية والانسانية – قسم العلوم الاجتماعية

2022م

Received |11|07|2022 – Accepted 17|09|2022 – Available online 15|10|2022

ABSTRACT

The current study aimed to assess the quality level of educational television programmes. The study sample consisted of 130 male and female students who obtained a baccalaureate certificate, and a questionnaire was prepared by the researcher and applied after calculating its psychometric properties. The results showed the presence of low estimates by students in the quality level of educational television programs according to the questionnaire's axes and the total score, and also indicated that there were no differences between students in their estimation of the quality level of educational television programs according to gender (male, female).

Keywords:Quality, Educational Television Programs, Quarantine, Baccalaureate.

الملخص

هدفت الدراسة الحالية إلى تقييم مستوى جودة البرامج التلفزيونية التعليمية. وتكونت عينة الدراسة من 130طالب وطالبة المتحصلين على شهادة البكالوريا، وتم إعداد استبانة من قبل الباحثة وتطبيقه بعد حساب خصائصه السيكومترية. وأظهرت النتائج وجود تقديرات منخفضة من قبل الطلبة في مستوى جودة البرامج التلفزيونية التعليمية وفقا لمحاور الاستبيان والدرجة الكلية، كما أوضحت عدم وجود فروق بين الطلبة في تقديرهم لمستوى جودة البرامج التلفزيونية التعليمية وفقا لمتغير الجنس (الذكر، الأنثى)

الكلمات المفتاحية: جودة، برامج تلفزيونية تعليمية، حجر صحي، بكالوريا.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

1.Introduction

The scientific and technological development that peoples have reached today has witnessed a great revolution in all aspects of life, and technological means of communication have been the leading leap in obtaining information in a very shorter circumstance and anywhere on the earth. The Internet, radio, television, cinema, computer, and satellite television networks were the paved way to know what is happening in the world, and to transfer knowledge without restrictions outside the walls of the school.This development in the field of communication and media has resulted in major challenges and great services for the individual, and has become the real gain in his dealings, developing his life, and enhancing his rest periods. At the same time, an opportunity for education and permanent education.

Television is considered one of those important technological means throughout the ages, which cannot be dispensed with in all cases, whether in the entertainment aspect, where the viewer is entertained with its entertainment programs to fill their leisure time, or in the media aspect in which it provides the viewer with various news information on political, economic and social issues... Etc., or in terms of providing scientific culture by delivering knowledge in the form of scientific tapes, educational programs that support the students' learning in various educational stages, including the stage of preparing for official exams.

With the emergence of the Corona crisis (Covid-19) in this era, the need for these technological means increased, as they were the only source to contain the crisis, whether in its social, economic, educational and other dimensions, as the task of communication and payment of great services contributed to this dire situation, especially during The period of quarantine imposed by the Algerian state on its citizens in order to control the situation and avoid the increase and spread of the epidemic throughout the country.

This procedure had a positive repercussion on the one hand in terms of reducing injuries and at the same time negative, especially in the educational field, where schools were closed, and The student has no other outlet to learn except for distance studies that he was not familiar with previously, especially students in different stages of education (Primary, Intermediate, Secondary), where attendance in the classroom is one of the basics of fruitful learning, as face-to-face learning in these stages is very important in the process of knowledge and skill acquisition Thus, this disconnection from the educational institution, caused among students, especially those who are waiting to pass an official exam at the end of the school year, great concern about reviewing lessons and strengthening them with private lessons they are accustomed to through their academic path, or the support based on the school level imposed by the school system through lessons procedures Support and reinforcement during and outside school hours.

Many countries rushed to online distance education to ensure continuity of education. However, some 826 million students (50%) who are kept out of schools due to the COVID-19 pandemic, do not have access to a computer, about 706 million (43%) lack Internet access and 56 million live in areas not covered by mobile networks. For many teachers, the use of digital tools is also a challenge. The closure of schools has left them with little time to find solutions to ensure continuity of teaching. As such, many do not have the skills required or digital equipment, while others lack connectivity due to insufficient financial means and/or lack of local supply

In light of the technological divide that exists, even in most developed countries (in Europe, 14% of households do not have access to the Internet and 22% do not have access to a computer), almost all states have already set up or wish to develop educational broadcasts on mass media such as television and radio, in order to reach a greater number of learners, especially the most vulnerable. These “traditional” media channels enjoy wide coverage and have taken advantage of the digital revolution of the past decade to increase their power and reach. (UNESCO & EBU,2020, p.1)

Accordingly, it can be said that technological means have become the only outlet under the epidemiological situation through educational programs that are broadcast to facilitate and support

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

continuous learning for learners in all educational stages. Especially since television is present in every home and individuals deal with it more than other means.Also, not all students have a computer or the Internet, some students live in remote places They do not have the means to communicate remotely, and even if they exist, the network is often weak.

Thus, television, with its capabilities in the field of video, sound and movement, has become a powerful and modern mass medium for conveying information to the public in the current era (Akyurek, 2005). It has become one of the most feasible means in education, because television programs combine image and sound at the same time, and educational television programs can contain educational means. This made television to be an effective education and culture tool. It conveys the real environment, samples, drawings and experiments, and thus it can serve all subjects and all levels of study. These technical capabilities that characterize television made it a means to present a lot of knowledge and skills. These capabilities support awareness and increase the effectiveness of the subject, thus reducing effort and shortening time. (Alwane, 1997, p.7)

Several studies have indicated that television is one of the of the best means, and practical experiments have been conducted that prove the superiority of television as an educational method at the level of public education. It has an impact which is superior to that of radio, newspapers and magazines. In developed countries two thirds of the population perceive television as their main source of information about national and international events.Hence, television represents a potential source of information, whose effectiveness depends also on the quality of viewing and on the viewer's competencies.(Siniscalco, 1996, p.208)

A study Hulela K, Kelebekae Kgathegang, & Boipono Macheng.(2016) examined the perceptions of Mathematics and Science teachers in senior secondary schools, in the Serowe and Palapye regions regarding the effectiveness of Botswana educational television (Betv) program in supplementing the school‟s instructional delivery. This was a descriptive study designed to assess the status as it was in schools. A close ended survey questionnaire was used to collect data from a census of 60 Mathematics and Science teachers. The study revealed that teacher respondents

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

perceived the television important as the results showed that There should be more TV and radio programs for all subjects**.**

Thus, satisfaction with educational television programs requires organizing them in accordance with quality standards, in terms of preparing them in accordance with the curricula and teaching modern methods. in addition to that, the output process for the educational session or episode must have a quality design in line with the presentation on the television screen, with Qualifying teachers to use this medium with good performance and high efficiency. Some studies have dealt with the evaluation of television educational programs in terms of their performance and the level of quality achievement in them, as the study of Samir Abdul Rahman Al-Shamīri on the quality of television educational programs in university education, proved that television educational programs is medium quality, close to good and are not very encouraging on the quality of presentation The educational sessions in terms of presenting the educational material, and also found that the quality of program recording is somewhat encouraging.

The study of the Public Opinion Monitoring Authority on the evaluation of educational programs on Egyptian television showed that the percentage of permanent follow-up to educational programs at the level of certificates was 82.5%, The reasons for not watching were the speed of explanation and lack of focus, preference for private lessons, inappropriate broadcasting of programs, and insufficient duration of the educational program. As well as the study of the Egyptian Radio and Television Union to examine the evaluation of systematic educational programs on radio and television, which showed that 99.8% of the students of middle and high school certificates admitted that they benefited from educational programs in understanding and absorbing the lessons, in addition to the HUNASANGER study on the evaluation of the interactive television network at NORTH CENTRAL TECHNICAL from the point of view of its students, and concluded that the TV network is more effective, and the study showed the students' satisfaction for their choice of the interactive TV network over traditional education. (Ashī, 2013)

Views may differ in estimating the quality of television educational programs according to gender, as has been proven by some studies, such as the study (Ashī, 2013) which indicated that

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

there is no difference between males and females in exposure to satellite channels, as it reached (68.8%) for males and (66.3%) for females.

Proceeding from the above, television channels are one of the main channels that can contribute to supporting the educational process in distance, especially in light of the epidemiological situation that the country is going through, which prevents physical attendance in classrooms by students who are candidates to pass an official exam at the end of the school year. To receive science, knowledge and school support in reviewing lessons in which students have difficulties in understanding, and at the same time making them in constant contact by recalling those lessons without interruption, In order to achieve this, it is necessary to provide quality in television education programs in terms of the quality of the presentation of the study material, the quality of the performance of the faculty, the quality of the temporal organization and the structural structure of the educational programs, the quality of the available material means, and the quality of the outputs of interaction with the television educational program. In light of this, the research problem is defined in the following questions:

1- What are the students' estimates to the quality level of educational television programs according to the axes of the questionnaire and the total score?

2- Are there differences between students in their estimating to the quality level of educational television programs according to the gender variable (male, female)?

2. The hypotheses of study:

2.1 Students have high estimates of the quality level of educational television programs according to the axes of the questionnaire and the total score.

2.2 There are differences between students in their estimating of the quality level of educational television programs according to the gender variable (male, female).

3- The importance of the study:

The research acquires its importance from the following:

- It is a basic and sensitive topic, which benefits students at various educational levels to benefit from educational programs presented on television, whether in normal circumstances or in times

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

of crisis, especially the current crisis that the country is going through represented by the Corona crisis, which resulted in the imposition of quarantine, and stopping studies, which calls for implementation The process of teaching and reviewing via television to achieve continuity of learning and to strengthen the review of lessons at a normal pace in order to reduce the anxiety factor of exam preparation.

- It helps educational officials to develop new strategies in the face of emergency crises that may limit the continuity of studies, by organizing educational programs at a level of quality that increases the demand for learning via television, as well as stimulates and encourages diligent work to achieve the best learning for learners.

- This study contributes to encouraging teachers to prepare and implement lessons with a high level of achievement to teach them to students via television, in terms of brief and useful explanations and in terms of the various methods used and attractive to learning, and to achieve the best interaction through the learners' response to them.

It informs decision makers in the field of education that it is necessary to select qualified teachers to carry out the task in all subjects on a continuous executive basis, in order to reduce private lessons that low-income people may not reach.

- It is useful in identifying the reality of the study materials shown on television and directed to the category of students who are candidates for the baccalaureate exam, by collecting adequate information about them in terms of their content and the efficiency of their performance, and fixing and modifying the errors that appear during their broadcast on television.

- Directing the attention of those responsible for the design and production of educational television programs to the necessity of observing when presenting the study materials to adhere to quality standards in terms of production and output, and in terms of templates and artistic forms that are displayed directly, and those that are presented recorded.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

4. **Objectives of the study:**

The current study seeks to achieve the following:

4.1 Identify the students' estimates to the quality level of educational television programs according to the axes of the questionnaire and the total score.

4.2 Revealing the differences between students in their estimating of the quality level of educational television programs according to the gender variable (male, female).

5. Definition of terms:

5.1 The Quality:

The concept of quality is one of the concepts most closely related to the services obtained by an audience of beneficiaries or customers who deal with an institution; This is because quality is often related to the beneficiary's satisfaction with the good or service he receives. (Illa & Al-Wad, 2017, p.10)

Quality is defined by the Oxford Dictionary: "It is the degree of excellence and superiority". (Sayed & Haddad,2012, p.4)

Quality is a set of distinguished principles, policies and organizational structures by using all available material and human resources for the purpose of improving performance and services provided, achieving the highest performance standard and verifying the extent to which performance and services provided match the target standards.(ṭawīl & titam, 2019, p.49)

Through theoretical definitions, the researcher concludes a procedural definition about quality as the quality in education can be defined as the totality of characteristics and qualities of the service provided in the field of education that meets the needs of students. It defines also as reaching the highest levels of good performance in presenting a specific subject program by the teacher using television technology.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

5.2 Educational TV programs:

When the Federal Communications Commission (FCC) implemented the Children's Television Act, they defined educational and informational programming as" any content that serves to further the positive development of the child in any respect, including the child's cognitive/intellectual or emotional/social needs".This definition set the stage for prosocial as well as academically oriented programs to qualify as educational and informational. Controversy quickly arose over what an educational program is when some of the initial television programs broadcast to meet the requirements of the Children's Television Act were of marginal educational value.(Calvert & al, 2001, p.105)

Among the definitions mentioned by the researchers, television program is defined as: “An idea or a group of ideas formulated in a specific television template, using the image and sound in all its technical details to achieve a specific goal”.(Ḥamdi & Shatwan, 2020, p.317)

Also, The television program is an idea that exists and is technically addressed by using television as a medium that has the capabilities of the media. (Abdul Halim, 2020, p.111)

In addion, the educational TV programs are defined as the transfer of generalizing ideas, knowledge and experiences through verbal or non-verbal interaction between a teacher and a learner or between a learner or teacher, through certain channels to achieve specific educational goals. It can be defined as the use of television in the field of education through educational programs to achieve educational or systemic societal goals (Al-Shamīri, 2015, p.211)

Educational TV programs are the lessons broadcast on television, which are directly related to the school’s study plan and are directed to a specific group according to their educational level.(Fellas, 2019, p.206)

The educational television programs in our current research define those programs that are implemented via television by teachers to facilitate the process of following up lessons I, distance for most of the study subjects and to overcome the difficulties that block them in those subjects that they will be tested at the end of the school year in the place of private lessons that students were unable to attend due to the Corona (Covid-19) pandemic.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

The **rechercher can define The quality of educational television programs procedurally** as the various characteristics and qualities that those programs include through the implementation of the courses associated with the curriculum and the educational system that aims to achieve specific educational goals. The quality of television educational programs is represented in several elements and axes represented in: the quality of the presentation of the study material, the quality of the performance of the faculty, the quality of the temporal organization and structural structure of the educational programs, the quality of the available material means, the quality of the outputs of interaction with the educational program. It is determined by the total scores obtained by the study sample members in answering the questionnaire applied to it.

5.3 quarantine:

Quarantine is the separation and restriction of the movement of persons potentially exposed to another infectious disease, to ascertain whether they are sick, and thus reduce the risk of transmission to others. However, the two terms are often used interchangeably. (krome, 2020)

During the outbreak of infectious diseases (eg, EVD, SARS, MERS, and COVID-19), quarantine measures are commonly implemented to limit disease transmission andmorbidity. Extensive research has shown that quarantine is important in reducing the number of people infected and the number of deaths, especially when there is no effective treatment for the disease. (Wang α Wang, 2020, p.691)

It is also seen as “isolating healthy individuals and working to limit their interaction with each other closely and continuously to prevent the spread of the disease by closing schools, universities, places of large gatherings and the field of cinemas, and canceling all sporting events and family and religious ceremonies.” (Jūza, 2021, p. 34).

The researcher defines quarantine as the medical procedure followed to stop the spread of infection from any apparent epidemic among people who carry an infectious disease or virus by staying at home or in another place determined by the state.

3.4. **Baccalaureate**

The baccalaureate is an official exam that the student passes at the end of the third year of secondary school. The baccalaureate certificate is the culmination of the secondary education stage, and a license to pursue postgraduate studies at the level of university institutions.

6. Theoretical background and previous studies:

6.1 The role of television in distance education:

The use of television as a visual medium has found great interest in the field of education, and some educational institutions have made it an integral part with their educational and educational policy, and television has become one of the most airy means of education, because television programs combine image and sound at the same time, and educational television programs can Contains teaching aids. This has enabled television to be an effective education and culture tool. It conveys realistic environment, samples, drawings and experiments. Thus, it can serve all educational materials and for all academic levels. These technical capabilities that characterize television made it a means to present a lot of knowledge and skills.(alwane,1997, p.8)

Given the epidemiological situation that led to the closure of schools, distance education was relied upon to ensure continuity, and the learner's right to obtain knowledge was not lost. Television played a major role in compensating for this through lessons provided by teachers in various subjects. Hence, studying through the medium of television is considered an important process in undermining the crisis and plays through the many roles it plays.

The role is revealed of television in distance education is prominent, It play role to deliver lessons to distance learners who has no regular interaction with a formal teacher in preparation of assessment. It is an effective & interesting medium of education for largest possible number of people. ETV is capable of creating interest & motivation in both children & adults. Rao (2010) highlights some of the unique characteristics of educational television. He reports "Fixed schedules, scarcity of time, ephemeral, continuous, holistic, aimed at average target viewers & rich in meaning are some salient features of broadcasts television".(Akhter, 2011)

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

6.2 Quality standards in educational television programs:

Television presents visual and verbal messages in a linear stream, imposing its own structure on them and thereby making comprehension difficult for the young viewer. Children have difficulty in recognizing and differentiating central from incidental material. in relating antecedents to consequences, and in preserving the temporal nature of the presentation. Television's structure and form are in part responsible for problems in abstracting and processing important and meaningful content. For example, central content is often presented verbally, whereas much of what is visually salient is also incidental to the main plot message. Moreover, when children do attend to verbal material they often find it abstract and lacking in concrete cues that facilitate processing or recall. The speed and linearity of presentation may interfere with such effective processing skills as pausing, verbal labeling, or rehearsal, shown to improve integration and recall of television content when used.(Watkins & al, 1980, p.672)

Much research has been conducted on the importance of television programs and their effects on political, effects economic andsocial attitudes and behaviors of people. However, there are few studies on the quality of educational television programs. Millerson (1966) treate the production of television programs in terms of the mechanic, aesthetics, methods and techniques were presented in detail, but the interlinking of aspects to provid sustantine information on the total process was not presented. Hence, no reliable means of television production evaluation was provided. (Shively, 1975)

In the late 1990s, researchers (Alexander et al., 1998) attempted to define “quality children’s television” by examining the characteristics of programs awarded the George Foster Peabody Award. Through an analysis of these programs, the authors determined that most of the award-winning programs were educational (25 percent) or dramatic (28 percent), and very few were animated. They noted that the claims for quality have changed over the last 50 years of awards for children’s programming and that industry leaders include production features and even humor in their definitions of quality, whereas the Children’s Television Act focuses more on educational value to determine quality. As part of an evaluation of the state of children’s television

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

programming in the United States, Jordan (1996) developed a “quality index,” calculated by evaluating ten different program elements that either contribute to, or detract from, the quality of a program. Factors that contribute to quality include: having content that is understandable and appropriate for the target audience, providing an enriching pro-social lesson or theme that is clear and understandable, and making the lesson integral to the story and/or pervasive throughout the program.(Lauricella & al,2013). In this regard, George N. Gordon categorizes appropriate presentations for educational television programs:

- Speaking oriented programs;
- Visuals oriented programs;
- Dramatically presented programs;
- Combined forms. (Akyurek, 2005)

In the application modes of digital educational television programs, M. X. Huang (2010) proposed that the innovative application modes of digital educational television programs including contents planning, the establish the transmission channels, construct the application platform, t-learning process and the evaluation of propagation effect . Rebeca P. Diaz has established a VOD system which was based on the web2.0 . M. X. Huang found the interactive ways of digital television programs when he analyzed the programs such as BBC and so on. Moreover, he divided it into three categories including enhanced TV combination package design, time-shifting design and integrated interaction design. Along with the above described, interactive television program also need equip the flexibility to support different device, system, and platform.(Zixun, 2016, 884)

The criteria and conditions that must be met to judge the quality of educational television programs vary, but the researcher has set some criteria derived from her field experience in the education sector, and at the same time collecting information from previous studies in line with the objectives of the study, and these criteria are as follows:

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

A. the quality of the study material presentation : Its content is included in :

(1)The extent to which the text of the required study material is complete,(2) applications to some lessons,(3) the attractiveness of the presented study material, (4) the subject matter is detailed in the explanation, (5) the speed in presenting the elements of the study material, (6) support for the theoretical explanation of the lesson with examples, (7) most of the classes include a solution to the topics of the baccalaureate exam, (8) providing samples of exam topics Prior to training to solve it, (9) the extensive explanation of the programmed lessons on TV compared to private lessons, (10) the preference for individual review rather than wasting time watching the TV lessons.

B. the quality of the faculty performance: Its content is included in :

(1)Using an interesting method to draw attention to the lesson, (2)interacting spontaneously when moving from posing the issue to solving it, (3)focusing in the explanation on the basic elements of the lesson, (4)diversifying the use of examples to bring understanding closer, (5)writing the scientific material in an understandable and clear manner, (6)observing the logical sequence in presenting the study material, (7)using words that prepare To automatically move from one element to another of the scientific material without causing confusion, (8)providing samples of questions that may fall on the exam in the presented material, (9) determining the correct answer plan for a model of the official exam topics, (10)explaining the lesson elements at length, (11) using an attractive display screen, (12) asking questions when moving From one element to another, (13)quickly moving from one element in the lesson to another after explaining it well, (14) directing students to the mistakes made in the official exam.

C. the quality of the temporal organization and the structure of educational programs:it contains :

(1) Presenting the data directly on the board with a prelude to the lesson, (2) the programmed time for the start of education is appropriate, (3) the duration of the lesson allows familiarity with the entire program, (4) the use of illustrative scenes when presenting the lessons, the lessons meet the

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

contents of the material, (5) the program includes excerpts from the lessons, (6) the lessons shown on TV are all from the official study program .

D. the quality of the available material means: Its content is included in

(1)Presenting ready-made geometric shapes that lead to good comprehension,(2) Extensive presentation of experiments, pictures, shapes and maps, (3)using the interactive whiteboard to increase the strength of focus,(4) supporting means of explanation are available,(5) transferring pictures, shapes and graphics to the space field in an attractive way, (6) using models of ready-made mathematical rules and equations in the shortest time, (7) The use of electronic dictionaries to explain the terms in a short time span, (8) clarifying the elements of the lesson in an interesting electronic presentation.

E. the quality of the outputs of interaction with the educational TV program: It has the following sub-criteria **:**

(1) Preferring to follow private lessons despite the quarantine, (2) obtaining new information in following the televised lessons, (3) identifying the weaknesses and strengths in some lessons, (4) being able to compensate for the lack of revising for the exam, (5) obtaining information to avoid errors in answering the exam paper, (6) gaining how much An enormous amount of unknown knowledge,(7) a decrease in exam anxiety since the inclusion of lessons on television, (8) the contribution of diversity in examples to the good comprehension of lessons, (9) the contribution of explanation on TV to summarizing lessons well, (10) the contribution of televised lessons to achieving success in the examination.

6.3 Previews Studies:

In this study, the research tried to limit some studies related to the topic under study, However, we found most of them dealing with the importance and effectiveness of educational television programs, and with regard to the research objectives of recognizing their quality in indirect education, that is, without attendance in classrooms, especially in light of the Corona crisis, and from it we know a set of studies that include some parts of those specific goals. These studies can be summarized as follows:

The researcher Fellas Rose (2019) made a study about the association between television viewing and children's executive function, academic performance, attention, language and play. The findings suggest the relationship between television viewing and children's development is complex. First, the likely effects of television may depend on children's individual characteristics, family and social context. Second, the features of television, such as content and editing pace, and the type of exposure (foreground or background) may affect outcomes. Specifically, watching high-quality educational content during preschool years improves children's basic academic skills and predicts subsequent positive academic performance.

Also, The Study of Akhter, Nasreen (2011) was conducted to evaluate the effectiveness of educational television programs in distance learning system. Using the procedure of survey method, this study finds out the worth of educational television programs. Its results are based on the responses of the learners of distance teaching system. The views of students were collected by using a questionnaire prepared by researcher because no standardized tool for the purpose of study was available. Questionnaire was developed by reviewing related literature on topic of study that was improved in light of the views of experts. Content validity and face validity of questionnaire was further determined by expert opinion. Results of the study indicated, ETV programs were very useful for students & majority of students get benefit of it. Therefore, there were some problems as well. In the light of the results of this study it was also found that majority of students don't get the broadcasts schedule of ETV programs because of which they miss the ETV programs & approximately half of the students who view the program cannot note down the important features of program because of slow writing speed and non availability of recording facilities.

Abed's study (2009) aimed to that aimed at identifying the skills of program presenters in satellite channels and their success in meeting the desires of the student audience in Jordanian universities.The study concluded that the most important factors affecting the success of TV presenters according to student viewers in Jordanian universities were speaking skills and the skills of technical factors important to a high degree, while body language and listening skills were moderately. and there are statistically significant differences at the significance level of ($\alpha = 0.05$)

in the arithmetic mean of the domains (body language, speaking skills and important technical factors) as factors in the success of television program providers according to the gender variable. And there were significant differences in the averages statistic at the significance level ($\alpha = 0.05$). Arithmetic in other fields of study (listening skills, speaking skills and important technical factors) as factors affecting the success of TV presenters according to the type of university.(alkhālidi & al, 2018,p.291)

The purpose of the Killian, James Frank Killian, James Frank (1972) study was to make an evaluation of Instructional Television in the College of Religious Instruction at the Brigham Young University.The overall findings of the study indicate that there was much discontent manifest, from both students and faculty, with the present TV enrichment program. This discontent seemed to be strongest in the areas of the types of presentations made on TV, the quality of the productions, and that the TV presentations were required and not optional. The discontent was manifested by the fact that one third of the students did not attend half the TV enrichment presentations during the semester.

Finally, we find that these studies are consistent with the first objective of the current study, which aims to determine the level of quality of educational television programs. Among the studies related to the first hypothesis are the researcher Fellas Rose (2019), the study of Akhtar Nasreen (2011) and the study of Abed (2009), in addition to the study of Killian and James Frank Killian and James Frank (1972). While the study of Abed (2009) agreed with the second objective of the current study related to gender differences in estimating the level of quality of educational television programs.

7. Methodology

7.1 Study method:

Based on the study's problem, objectives and questions, The researcher used the descriptive approach, which depends on an accurate and detailed description of a specific phenomenon or topic on a qualitative or quantitative digital image. based on practical results and then interpreting them in an objective manner and in line with the actual data of the phenomenon .

7.2 Limitations of the study:

The limitations of the study were as follows:

7.2.1 Spatial limits: The study was conducted at the Institute of Social and Human Sciences at the University Center Marsali Abdullah after the university registration period for successful students in the baccalaureate, whom came from certain secondary schools.

7.2.2 Time limits: The study tool was applied after the baccalaureate results were released, students registered at the university in 2021, and the study was completed in january 2022.

7.2.3 Human limits: The study was applied to successful students in the baccalaureate, whom they had experienced in tracking education television programs, without attending classes in educational institutions due to the spread of the Corona epidemic, and the imposition of quarantine, given that the year 2020 is the year of the emergence of the epidemic for the first time Strong spread. And through it, the quarantine was imposed, which forced the students, while preparing for the exam, to follow the lessons through TV channels programmed by the educational authorities on a regular basis in various study subjects to support the review and to avoid anxiety about the exam.

7.3 Study population and sample:

The study sample consists of successful students in the baccalaureate to express their opinions on the educational TV programs where they followed their lessons after the study was suspended, which prevented them from attending private lessons face to face. A random sample was withdrawn from them and reached 130 male and female students, including 89 females, 41

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

males from the Institute of Social and Humanities after the period of university registration whom affiliated with some secondary schools secondary schools in the state of Tipaza, such as Kerfa Muhammad in Bourguigua, Al -Jilali Bounaamah, Prince Khalid, Malik Al -Bukrani and Si ben Yousef kadou.

Table (1): the distribution of the sample members according to the sex

Gender	Male	Female	Total
Frequencies	41	89	**130**
Percentages	31.53	86.46	**100**

Source: (prepared by the researcher based on SPSS 22 outputs)

7.4 Study tools:

The researcher prepared a questionnaire consisting of 50 statements, and after calculating its psychometric properties, it consisted of 49 statements, and the results were as follows:

7.4.1 Description of the study tool in its initial form:

A- **the validity of the tool:**

A.1 . **The validity of the experts**:

The researcher presented the questionnaire in its initial form to (5) professors refereed from faculty members working at the Institute of Social and Human Sciences at university center, with the aim of knowing the extent of agreement among them that the questionnaire's items are related to the goal for which the questionnaire was developed, and the extent to which each of the questionnaire's item belonged to the axis. The researcher has modified it according to the observations of the experts and its application after approval.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

A.2 **Internal consistency validity**:

To calculate the validity of the internal consistency, the researcher used a statistical method represented in the Pearson correlation coefficient, which shows the degree of correlation of each of the terms separately with its dimension. This is evident from the tables that show the questionnaire validity coefficients by the method of internal consistency. The results of the correlation were as follows:

A.2.1 The validity of the internal consistency of the first axis:

Table (2): The consistency coefficients of for the first axis items

items number	Correlation coefficient	Statistical significance	items number	Correlation coefficient	Statistical significance
1	0.35	0.00	25	0.32	0.00
6	0.40	0.00	30	0.35	0.00
11	0.51	0.00	33	0.20	0.02
16	0.49	0.01	38	0.20	0.02
22	0.41	0.00	46	0.30	0.00

Source: (prepared by the researcher based on SPSS 22 outputs)

We notice from Table (2) that the consistency coefficients of the questionnaire items for this axis are significant at the 0.01 and 0.05 level.

A.2.3 The validity of the internal consistency of the second axis:

Table (3): The consistency coefficients of for the second axis items

items number	Correlation coefficient	Statistical significance	items number	Correlation coefficient	Statistical significance
2	0.54	0.00	29	0.37	0.02
7	0.42	0.00	32	0.24	0.00
12	0.33	0.00	35	0.36	0.00
17	0.49	0.00	36	0.46	0.00

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

23	0.39	0.00	41	0.35	0.00
24	0.35	0.00	45	0.37	0.00
27	0.30	0.02	48	0.32	0.00

Source: (prepared by the researcher based on SPSS 22 outputs)

We notice from Table (3) that the consistency coefficients of the questionnaire **statements** for this axis are significant at the 0.01 and 0.05 level.

A.2.4 The validity of the internal consistency of the third axis:

Table (4): The consistency coefficients of for the third axis items

items number	Correlation coefficient	Statistical significance
3	0.28	0.00
8	0.40	0.00
13	0.46	0.00
18	0.44	0.00
34	0.57	0.00
43	0.39	0.00
44	0.54	0.00

Source: (prepared by the researcher based on SPSS 22 outputs)

We notice from Table (4) that the consistency coefficients of the questionnaire items items for this dimension are significant at the 0.01 level.

A.2.4 The validity of the internal consistency of the fourth axis:

Table (5): The consistency coefficients of for the fourth axis items

items number	Correlation coefficient	Statistical significance
4	0.57	0.00
9	0.29	0.00
14	0.24	0.00
19	0.47	0.00
20	0.54	0.010
31	0.38	0.00
39	0.53	0.00
47	0.40	0.00

50	0.11	0.23

Source: (prepared by the researcher based on SPSS 22 outputs)

We notice from Table (5) that the consistency coefficients of the questionnaire statements for this dimension are significant at the 0.01 level, except for item (50), which is not significant.

A.2.5The validity of the internal consistency of the fifth axis:

Table (6): The consistency coefficients of for the first axis items

items number	Correlation coefficient	Statistical significance	items number	Correlation coefficient	Statistical significance
5	0.24	0.02	28	0.54	0.00
10	0.22	0.02	37	0.30	0.01
15	0.30	0.03	40	0.25	0.02
21	0.50	0.00	42	0.27	0.02
26	0.66	0.00	49	0.34	0.01

Source: (prepared by the researcher based on SPSS 22 outputs)

We notice from Table (6) that the consistency coefficients of the questionnaire items for this dimension are significant at the 0.01 and 0.05 levels.

B. **the reability of the tool**:

- **Alpha Crombach coefficient**

It is a method that depends on consistency in the performance of the individual from one item to another, and the value of the Cronbach alpha coefficient for the questionnaire as a whole was (0.70), which is an acceptable value for the adoption of the questionnaire and its application to the basic sample. The Cronbach alpha coefficient was calculated for the five axes of the questionnaire as follows:

- The value of Cronbach's alpha coefficient for the first axis is (0.55)
- The value of Cronbach's alpha coefficient for the second axis is (0.58)
- The value of Cronbach's alpha coefficient for the third axis is (0.63)
- The value of Cronbach's alpha coefficient for the fourth axis is (0.54)
- The value of Cronbach's alpha coefficient for the fifth axis is (0.52)

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

7.4.2 Description of the questionnaire in its final form:

The questionnaire, in its final stage, after calculating the psychometric characteristics, consists of 49 items, and contains five axes. The questionnaire included on its first page data asking about gender only, and the respondent was asked to put a mark (X) in front of the five appropriate alternatives for each item.The characteristics of the final questionnaire's axes were defined as follows:

A- **The first axis**: **the quality of the study material presentation**, includes (10) items, namely (1-6-11-16-22-25-30-33-38-46).

B - **The second axis**: **the quality of the faculty performance**, includes (14) items, namely (2-7-12-17-23-24-27-29-32-35-36-41-45-48).

C - **The third axis**: **the quality of the temporal organization and the structure of educational programs,** includes (7) items (3- 8-13-18-34-43-44).

D - **The fourth axis**: **the quality of the available material means**, includes (8) items, namely (4-9-14-19-20-31-39-47)

E- **The fifth axis**: **the quality of the outputs of interaction with the educational TV program**, includes (10) items, namely (5-10-15-21-26-28-37-40-42-49).

7.4.3 The method of correcting the questionnaire and interpreting its results:

Likert method with a five-step scale depends on giving the positive items the scores in the order (5, 4, 3, 2, 1), and in the negative items the order is reversed, where the items are given the scores (1, 2, 3, 4, 5).

8. Data Analysis :

In order to answer the hypotheses of the study, the data was unloaded and processed statistically by applying the Social Statistical Package Spss program, and the statistical methods for data processing were as follows:frequencies, percentages, arithmetic mean, standard deviation, correlation coefficient to calculate validity, reliability coefficient Alpha Cronbach, "t" test.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

9. Results and Discussion :

9.1. First hypothesis:

The first hypothesis states the following:" Students have high estimates to the quality level of educational television programs according to the questionnaire axix and total score".

To verify this hypothesis, we used a one-sample test in order to compare the mean mean total scores on the questionnaire of study directed to students and the hypothetical mean resulting from the ouput of multiplying the number of questionnaire items by the mean scores of its Options, and the results were like:

Table 7: Test Results - T - One sample to compare an mean of the total degree on the study questionnaire directed to students and the virtual mean.

Table (7): Test Results - T - One sample to compare an mean of the total degree on the study questionnaire directed to students and the virtual mean

Axes/ total score	Sample	Arithmetic mean	standard deviation	virtual mean	t-test	Degrees of freedom	Statistical significance
Axis1	130	27.13	4.23	50	72.99	129	0.000
Axis2	130	38.14	6.52	70	66.62	129	0.000
Axis2	130	18.54	3.72	35	57.30	129	0.000
Axis3	130	22.16	4.47	40	65.43	129	0.000
Axis4	130	28.56	5.35	50	60.79	129	0.000
Axis5	130	130.70	15.66	245	98.06	129	0.000

Source: (prepared by the researcher based on SPSS 25 outputs)

Through the above table, it is clear that the study sample of the students was estimated at 130 participants, the arithmetic mean of their total scores on the questionnaire items in the quality of educational television programs directed to them was: 130.70 with a standard deviation of: 15.66, while the virtual mean resulting from the product of the number of these items The questionnaire in the mean score of its alternatives reached: 245, which is greater than the arithmetic mean. The t-test value calculated for one sample was equal to: 98.06 with degrees of freedom of 129, which is a statistically significant value at a level less than 0.01.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

It is also clear from the table that the vitual mean resulting from the output of multiplying the number of items of these five axes by the mean degrees of its options, was greater than the arithmetic mean. Where the vitual mean for the first axis was 50 and the arithmetic mean was 27.13 with a value (t) of about 72.99, and for the second axis it was 70 and the vitual mean was 38.14 with a value of (t) about 66.62, while the vitual mean for the third axis was 35 and the arithmetic mean was 18.54 and its value (t) was 57.30, while The vitual mean for the fourth axis was 40 and the arithmetic mean was 22.16, with a value of (T) 65.43. The statistical significance of the t-test values calculated for one sample for each axis was less than the significance level 0.01.

Based on these values, we can say that the data of the current study supported the text of the first hypothesis, and therefore we can say that we are 99% sure that the stuents have low estimates to the quality level of educational television programs under quarantine, according to the axes of the questionnaire and the total score.

We did not find studies that agreed with this result. Rather, we found with what denied this result, such as a study where Samir Abdul-Rahman Al-Shamīri's study on the qualitative quality of TV educational programs in university education concluded that TV educational programs are of medium quality and close to good, not very encouraging on the quality of presentation Educational sessions. Also denied a study of Fellas Rose (2019) which showed that the educational content viewed was of high quality.

The current result is due to the fact that students, in the preparation period for the exam, may not follow these television programs on a continuous basis, or due to the poor design of the programs in terms of image, sound and movement, in a way that makes them uninteresting and unattractive, and may be due to the failure to use various strategies and methods in teaching. The speed of performance by teachers who adhere to time is a factor that affects the response through the presence of individual differences in comprehension.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

9.2 Second hypothesis:

The second hypothesis states the following:"There are differences between students in their estimating to the quality level of educational television programs according to the gender variable (male, female)".

To verify this hypothesis, we used a t-test for two independent samples in order to compare students 'degrees in the Question of TV Programs according to the gender variable (male/female), and the results were like:

Table (8): T-test results for two independent samples to compare the mean scores of the students in the questionnaire according to the gender variable (male/female)

gender	Sample	Arithmetic mean	standard deviation	t-test	Degrees of freedom	Statistical significance
female	89	134.35	15.26	0.62 -	128	0.71
male	41	135.43	16.66			

Source: (prepared by the researcher based on SPSS 25 outputs)

Through the above table, it is clear that the arithmetic mean of female scores in the total score on the quality questionnaire of educational television programs was: 134.35, with a standard deviation of: 15.26; The arithmetic mean of male scores in the total score on the quality questionnaire of educational television programs was estimated at: 135.43, with a standard deviation of: 16.66. It is higher than the standard deviation for females. The value of the t-test calculated for two independent and homogeneous samples was equal to: - 0.62 with degrees of freedom of 128, and it was not statistically significant.

In light of the foregoing, we conclude that the current study data were not in support of the text of the second hypothesis, and therefore, we can say that there are no statistically significant differences among members of the study sample at the level of quality of educational TV programs according to the gender variable.

These results are in agreement with the study (Ashī Hanan Ahmed, 2013), which indicated that there is no difference between males and females in exposure to satellite channels, as it reached

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

(68.8%) for males and (66.3%) for females. While the study of Abed (2009) denied the result, as it confirmed the existence of statistically significant differences according to the gender variable in the following areas (body language, speaking skills and important technical factors) as factors in the success of TV presenters.

This is due to the fact that students live in the same conditions of the epidemic and quarantine which is imposed on them, this last one restricted the practice of activities for both sexes while preventing them to follow up the review through private lessons that were heavily focused on controlling the materials tested in them on the day of the exam, and this led to the formation of a unified view about the situation that they lived it during the period of preparing for the exam and following the lessons on television.

10. **Conclusion**:

Quarantine, as an imposed strategy to reduce the spread of the Corona epidemic, has led to the restriction of the movement of the individual in general, and the educated in particular, to practice his study activities in educational institutions and to follow up the review in private lessons. Thus, the higher authorities have taken alternative measures that facilitate the achievement of better learning and the continuity of it without interruption in order to reduce the anxiety of learners who are going to take the baccalaureate exam, which is an official exam that qualifies the successful person to continue higher studies to achieve his future ambitions. The best procedure was to present the lessons via television, which we have touched through the results reached on achieving a low level of quality for those educational programs related to the provision of lessons related to the baccalaureate exam. Hence, in the outputs of this study, we try to suggest some of the following recommendations that may serve as a point of hoped change in the near future in order to improve the educational programs presented on television, which are as follows:

- The need to develop a national strategy to confront emergency crises that limit the continuity of study and teaching in the classroom, by organizing these programs in coordination with the actors involved in this, both at the level of the Ministry of Education and the Ministry of Communication.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

- Activating educational programs at the level of educational institutions, in order to reduce the phenomenon of private lessons that burdened families, especially those with middle and weak incomes.
- Benefiting from international experiences and expertise in terms of designing television educational programs at a level of quality.
- Training those in charge of the teaching process through television with a level of competence that achieves good and effective performance.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

References :

-Abdel Ḥalim, M. A.(2020).The Role of Children's Television Programs in Developing Values for Kindergarten Child from the Point of View of Teachers, *The Arab Journal for Child Media and Culture*, 3(12), p.101-120. Retrieved from https://search.emarefa .net/ar/detail/BIM-980396-

- Al-Khālidi, I. K. S., Rabābza, M. A. ḥ., & Bani zīssa, A. A. (2018). Assessing the skills of religious program presenters on Jordanian television from the point of view of faculty members in Sharia faculties in Jordanian universities, *Journal of Dirassat in Humanities and Social Science*s, 45(2), 285-299.

-Alla, A., & Al-Wad, N., (2017). Satisfaction of university students with the quality of educational services - a field study at the universities of Djelfa and Laghouat, *Al-Riwaq magazine*, 5, 5-31.

-Al-Shamīri, S. A. (2015). The qualitative quality of television educational programs in university education (analytical study of television educational episodes at the University of Science and Technology), *Andalus Journal for Humanities and Social Sciences*, 13 (8), 201-248. Retrieved from https://search-emarefa-net.sndl1.arn.dz/ar/viewer/BIM-678740

-Alwane, A. A. (1997). production of educational television programs for some scientific departments in the College of Fine Arts, *Al-Akamey Magazine*, 5-16, 5-16. Retrieved from https://search-emarefa-net.sndl1.arn.dz/ar/viewer/BIM-431778 PDF

-Akhter, N. (2011). Evaluation of Educational Television Programs for Distance Learning, *The Turkish Online Journal of Educational Technology (TOJET)*, 10(4), 189-194. Retrieved from https://www.researchgate.net/publication/296819302_Evaluationofeducational _te lev isi on _programs_for_distance_learning

-Akyurek, F.A. (2005). A model proposal for educational television programs. Retrieved from https:// files.eric.ed.gov/fulltext/ED490373.pdf

- Ashī, H. A. (2013), Students' opinions towards establishing an educational satellite channel (a survey of a sample of students at King Abdulaziz University), *The Arab Journal of Media and Communication*, Issue 9, 167-210. Retrieved from https://search-emarefa-net.sndl1.arn. dz/ar/viewer/BIM-329581

-Calvert, S L., Kotler, J. A., Murray, W. F., Gonzales, E., Savoye, K., Hammack, P., Weigert, S., Shockey, E., Paces, C., Friedman, M., & Hammar, M. (2001). Children's online reports about educational and informational television programs, *Applied Developmental Psychology*, 22,103 - 117. Retrieved from http://cdmc .geor geto wn.edu/wp-content/ uploa ds/2015/03/Calvert-Kotler-Murray-Gonzalez-Savoye-Hammack-Weigert-Shockey-Paces-Friedman-Hammar-2001.pdf

-Fellas, R. (2019).The effect of TV children programs on learning principles of Arabic Language, *Arabic Language Journal*, 43(21), 201-228. Retrieved from https://search-emarefa-net.sndl1.a rn.dz/ar/viewer/BIM-888832

-Ḥamdi, M. A., & Shatwan, M. (2020). The Values in the Contents of Charitable TV Programs: An Analytical Study of the "My Heart Is Reassured" Program on the Abu Dhabi Satellite Channel, *The Algerian Journal of Media Research and Public Opinion*, 3(2), 312-342.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

-Hulela K., kgathegang, K., & Macheng, B.(2016).Teachers' perceptions towards the Botswana educational television program (Betv) in delivering instruction on mathematics and science, Journal of Educational Research and Review Vol. 4(1), pp. 6-13.

-Jūza, A., (2021), Mental Health in the Time of Corona and the Repercussions of Home Stone, *Journal of Legal and Social Commons*, 1 (6), 201-231. Retrieved from ttps://www.asjp.cerist.dz/en/article/147195

-Lauricella, Byalexis R., Robb, Michael B., & Wartella, E.(2013). Challenges and suggestions for determining quality in children's media**,** *The Routledge International Handbook of Children, Adolescents and Media*, (425-432), **(**1st ed.), Routledge, France. Retrieved from file:///C:/Users/TOSHBA/Downloads/9780203366981_previewpdf.pdf

-Killian, J. F. (1972). An Evaluation of Instructional Television in the Brigham Young University College of Religious Instruction, *Dissertations of Degree Doctor*. Department of Church History and Doctrine**,** Brigham Young University. Retrieved from https://scholarsarchive.byu.edu/etd/4846

-Krome, M. (2020). Maslow's theory of needs under quarantine, *Al-Riwaq Journal of Social and Human Studies*, 6(1), pp. 201-215. Retrieved from https://www.asjp.cerist.dz/en/down Article/289/6/1/117704

-Sayed, H., & Haddad, B., (2012). Towards the application of total quality management in the higher education sector with a presentation of the experiences of applying total quality management in some different universities, *Journal of Economic Studies*, Vol. 6(1), 1-16.

-Shively, Joe E.(1975). Evaluation of the Technical Quality of Educational Television Programs, *Educational Technology*, 15(11), 49-52. Retrieved from https://www. jstor.org/ stable/44418865

-Siniscalco,M. T.(1996).Television Literacy: Devlopment and Evaluation of aprogram aimed at Enhancing TV News Comprehension, *Studies in Educational Evaluation*, 22(3), 207-221. Retrieved from

-Ṭawīl, T. D. (2019). Foundations of the application of total quality in the higher education sector, a study of the experiences of a group of countries, *the Algerian Journal of Social and Human Sciences*,7 (0), 47- 65.

-UNESCO, E. B. U. (2020). *Education Response to COVID-19: Virtual knowledge-sharing workshop on distance education programmes using radio and television*, In the framework of the UNESCO Global Coalition for Education. Retrieved from https://en .unesco. org/sites/ default/files/unesco_workshop-setting_educational_radios_and_televi si ons-concept-note-en.pdf

-Wang, R. & Wang, Q.(2022). Determination and estimation of optimal quarantine duration for infectious diseases with application to data analysis of COVID-19, *The International Biometric Society*, 78(2), 691-700. Retrieved from Retrieved from arXiv:2006.05002v2.

-Watkins, B. A., Calvert, S. L., Huston-Stein, A., & Wright, J. C. (1980). Children's recall of television material: effects of presentation mode and adult labeling. *Developmental Psychology*, 16, 672- 674. Retrieved from https://doi.org/10.1037/0012-1649.16.6.672

-Zixun, H. (2016). How to Design and Apply Interactive Digital Educational TV Programs Based on the ADDIE Model, *International Journal of Information and Education Technology*, 6(11), 884- 889. Retrieved from DOI:10.7763/IJIET.2016.V6.810

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

Teachers' Perception about the Teaching of English at the Institutes of Vocational Training in Algeria

Fouzia Bouchareb [1*], Hassina Bouchareb [2]

[1] University of Abu El Kacim Saad Allah, fouzia_bouchareb@yahoo.fr

[2] ENS Bouzareah, bouchareb.hassina@ensb.dz

2022

Received |08|08|2022 – Accepted 16|09|2022 – Available online 15|10|2022

Abstract:

This study aimed at evaluating the efficiency of the teaching of English at the Institutes of Vocational Training in Algeria from the teachers' perception. The sample of study represented 10 teachers in the city of Algiers. In order to achieve the aims of the study, the researchers used a Likert's 5-scale format questionnaire that was administered to the English teachers. This questionnaire consisted of 25 items grouped in 5 domains which aimed to evaluate different aspects of the ESP training program, namely its 'aims and objectives', 'the trainers', 'the training materials', 'evaluation and assessment techniques' and 'aids and facilities' provided for the learners by these institutes. The results of the study have shown that the teachers were dissatisfied with the training program regardless to their qualifications, experience or vocational background. However, their perceptions of three areas of the program, namely 'training materials', 'the trainers', and 'evaluation and assessment' were higher.

The study recommends more studies that investigate teaching ESP in Algeria in more areas and giving more attention to the training needs in the country.

Key words: Evaluation, ESP, Vocational Training

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

1. Introduction

The institutes of vocational training in Algeria provide a variety of trainings to school leavers in different areas such as management, graphic arts, and agriculture… etc; however the teaching of English in many of these Vocational Institutes in the country often receives very little attention.

In fact, many of the vocational English training or English for Specific Purposes (ESP) programs in these institutes have many shortcomings which are the result of the current practices and policies concerning teaching English. Some examples of these are the number of teaching hours allocated for the subject, the English training materials, the lack of modern technologies and facilities for teaching, and even the lack of qualified teachers who, in many cases, received general English training rather than ESP where they have to deal with technical language and understand new vocabulary which they may not be familiar with such as accounting terms, commerce terms…etc.

In the light of these facts about the program, the present study aims to evaluate the effectiveness of the training program for teaching English at the Institutes of Vocational Training in Algeria from the teachers' view point. This evaluation will be in terms of the aims and objectives of the program, the different needs of trainees such as the materials used, the methods of teaching implemented, the assessment techniques and aids and facilities provided.

The importance of the current study lies in the fact that it provides in-depth information about the ESP program in the Institutes of Vocational Training in the country. This investigation, in fact, provides important information about current situation of ESP teaching in Algerian IVT by showing its weaknesses, and attempt to give suggestions and recommendations to ameliorate this situation, and strengthen the positive aspects of it, besides the fact that a very limited number of studies on the field are made in the country.

In this context the study attempts to answer the following ***main question:***

- How do English language teachers evaluate the ESP Program at the Vocational Institutes?

2.Literature review:

After the Second World War English became the global language and increasing numbers of learners all over the world get interested in English; however, every category of learners needed different kind of English, this gave birth of what is known as Specific English or English for Specific Purpose.

Scholars in the field of ESP presented different definitions about it. Indeed, Hutchinson and Waters (1987:18) defined ESP as being an *approach* rather than a *produc*t by which they mean that ESP does not involve a particular kind of language, teaching materials or methodology. They suggest that the basic question of ESP is: - why does the learner need to learn a foreign language?

Mackay and Mountford (1978: 2) defined ESP as a language that is generally used to refer to the teaching of English for a clearly utilitarian purpose. The latter is usually defined with reference to some occupational requirement.

This definition is supported by Harmer (1983: 1), who defined ESP as "…situations where the student has some specific reasons for wanting to learn a language". That is to say, in an ESP situation, the learner wants to learn the target language in order to achieve specific ends.

In relation to program evaluation, Robinson (2003) defines it as forming judgment about the value of a particular program through the collection, analyses, and interpretation of information. According to her the purpose of such evaluation is to provide information on 'perceptions of a program's value', examining the extent of the objectives met, and giving suggestions to the people concerned about necessary changes for improving the program (Robinson, 2003: 199).

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

3- Research Methodology

The present study is classified as descriptive survey which collects data through field investigation. The purpose of such data collection is mainly to answer the research question concerning the population and sample. In this survey, the researcher evaluated the ESP training program at the Vocational Institutes in Algeria for the purpose of identifying the training needs of the teachers of English in these institutes.

3.1 Population and Sample

The population of the study represents all the vocational institutes in Algeria. However, the study is limited to the institutes available in Algiers. The number of these institutes is nine. We used cluster sampling system, where four institutes were selected among the nine. From these institutes, we selected the total number of teachers available at these institutes who represented ten (10); nine of them are females and only one is male. Most of these teachers were relatively new or have average experience, and most of them did not have technical background knowledge. The details about the teachers participating in the study are in the following table.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

Table (1)

Details of the ESP Teachers in the Sample Vocational Institutes

No.	Name of Vocational Institute	Qualification			Experience				Vocational Background		
		B.A	More than B.A	Total	1-5	6-10	10 +	Total	Yes	No	Total
1	Graphic Arts and Printing Institute	3	0	3	2	1	0	3	1	2	3
2	Management Institute	2	1	3	2	1	0	3	2	1	3
3	Refrigeration Institute	1	0	1	0	1	0	1	0	1	1
4	Electronic Institute	3	0	3	3	0	0	3	0	3	3
	Total	**9**	**1**	**10**	**7**	**3**	**0**	**10**	**3**	**7**	**10**

3.2. Instruments of the Study:

In order to evaluate the effectiveness of teaching English in the vocational training program and measure the training needs of the teachers, we implemented a questionnaire this questionnaire is in two parts. The first part provides personal information about teachers, and the

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

second provides a number of items that aim at evaluating the program. The questionnaire used Likert's five-scale format and consisted twenty-two items in the five domains as follows:

1. Aims and Objectives of the Training Program: Items (1 - 5)
2. ESP Training Materials: Items (6 - 9)
3. The Trainers: Items (10 - 14)
4. Evaluation and Assessment of the trainees: Items (15 - 18)
5. Aids, Facilities and Technology: Items (19 - 22)

3.3 Reliability of the Instruments

Reliability of the instruments is tested by employing Cronbach Alpha Coefficient of internal consistency of the questionnaire. The results of this test have shown high reliability where the value of Alpha for all the items grouped together in the teachers' questionnaire was (0.93). The details of this test are in the following table:

Table (2)

Results of the Reliability Coefficient Alpha for the two Questionnaires

Domain	**Items in the Questionnaire**	**Categories**	**Cronbach Coefficient Alpha**
Teachers' Questionnaire	Items: (1 - 5)	Aims of the Program	0.93
	Items: (6 - 9)	Training Materials	0.96
	Items: (10 - 14)	The Trainers	0.81

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

Domain	**Items in the Questionnaire**	**Categories**	**Cronbach Coefficient Alpha**
	Items: (15 - 18)	Evaluation of the Trainees	0.81
	Items: (19 - 22)	Aids, Facilities and Technology	0.88
	Items: (1 - 22)	All the Items together	0.93

As can be seen in table (2), Alpha coefficient scores were high for most of the categories which indicates that the questionnaire was reliable and its result could be trusted from a statistical point of view.

3.4 Data Collection

The data of the study was collected from the teachers involved by means of a questionnaire during the second semester of the academic year (2011 -2012). We were able to collect this data by visiting these institutes and meeting the people involved personally in these institutes and explaining any items that may not be clear to them. There was high return rate of the questionnaire for the teachers because we had to monitor the data collection ourselves. No questionnaires were omitted among those distributed to the teachers as we had to check all the questionnaires carefully before collecting any of them from the people involved.

4. The Results

The data analysis of the questionnaire was conducted by using SPSS 16.0. The statistics computed in the study were the means, frequencies, standard deviations and T-test for two independent samples.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

4.1. The Results of the Study Related to the Research Question: (How do English language teachers evaluate ESP Program at the Vocational Institutes?)

To answer this question, means and standard deviations of the trainers' responses to the items in the teachers' questionnaires were analyzed. Table (3) and chart (1) show the details of the data analysis.

Table (3)

The Teachers' Perceptions of the ESP Training Program at the Institutes of Vocational Training in Algeria

No.	Domain	Items	N	Means	Std. Dev	Level of Need
1	Aims of the Program	1 - 5	10	3.64	0.70	High
2	Training Materials	6 - 9	10	3.40	1.17	Average
3	The Trainers	10 - 14	10	3.90	0.61	High
4	Evaluation of the Trainees	15-18	10	3.70	0.26	High
5	Aids, Facilities and Technology	19-22	10	2.83	1.09	Average
	The Program	1-22	10	3.49	0.63	Average

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

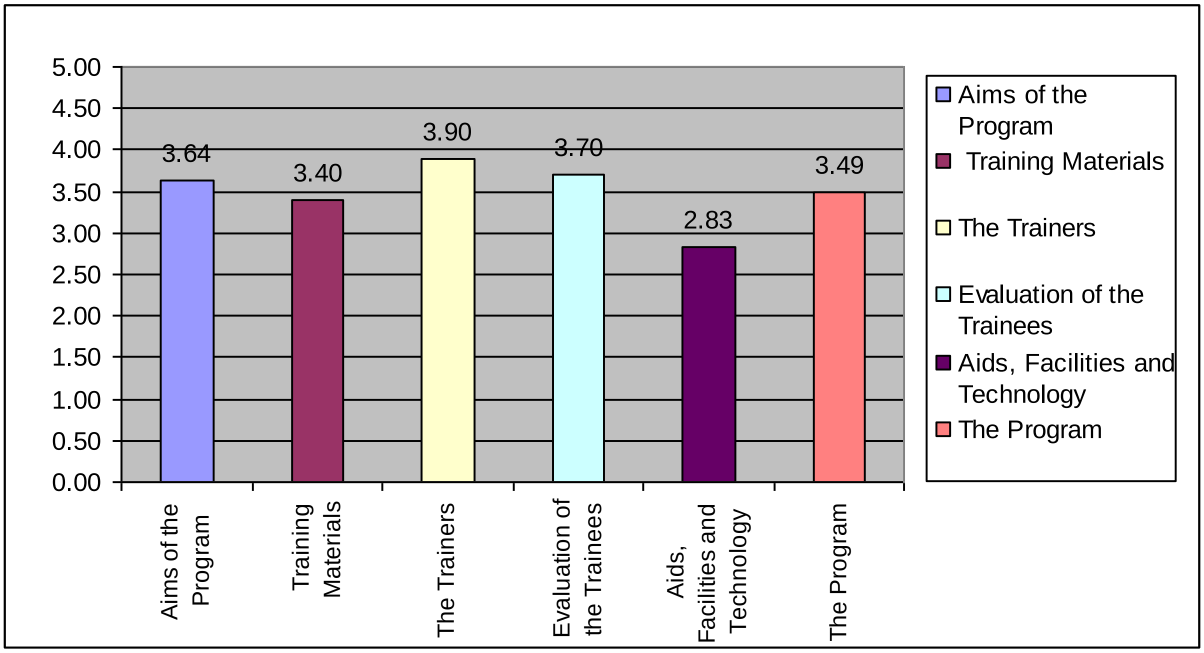


Chart (1)

The Teachers' Perceptions of the ESP Training Program at the Institutes of Vocational Training in Algeria

The above table and chart show the results of the trainers' responses to the questionnaire in the five domains. As can be seen above, the trainers' rating of their trainees' needs was clearly 'high' in most of the domains. The highest means were 3.90 given to 'the trainers' and 3.70 given to 'evaluation of the trainees'. The lowest rating, on the other hand was given to 'aids and facilities' which was given 2.83'. The rest of the domains were relatively high with the values of 3.64 for 'aims of the program' and 3.40 'training materials'. However, the teachers' perceptions of the program in general were relatively high (M = 3.49)

The details of the results of the teachers' responses for each domain are presented in tables (04, 05, 06, 07 and 08).

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

Table (04)

The Teachers' Perceptions of the Aims and Objectives of the ESP Training Program at the Institutes of Vocational Training in Algeria

No.	Competencies	N	Mean	Std. Dev	Level
1	The vocational English training program provides my students with the basic technical vocabulary they need in their field of study.	10	4.10	0.57	High
2	The vocational English training program enables my students to read and understand authentic texts in their field of study.	178	3.70	0.82	High
3	The vocational English program enables my students to express themselves in writing about their field of study.	178	3.60	0.84	Average
4	The vocational English program enables my students to understand authentic listening texts in their field of study such as T.V programs or lectures…etc.	178	3.40	0.84	Average
5	The vocational English program enables my students to express themselves clearly when they talk about topics related to in their field of study.	178	3.40	0.84	Average

Table (04) shows the details of the teachers' responses to the first category, *'aims and objectives'* of the ESP Training Program at the Institutes of Vocational Training in Algeria (items: 1-5) in descending order. This table shows that most teachers are satisfied with the 'aims and objectives of the ESP as many of them gave relatively high score to two items out of five, namely 'providing students with the basic technical vocabulary they need in their field of study' (M= 4.10) and 'enabling students to read and understand authentic texts in their field of study.. .' (M = 3.7). The other three items were Average but still have slight differences when compared to the highest items.

Table (05)

The Teachers' Perceptions of the Training Materials of the ESP Training Program at the Institutes of Vocational Training in Algeria

No.	Competencies	N	Mean	Std. Dev	Level
6	The training materials provided in the vocational English program are relevant to the field of students' study.	178	3.60	1.26	Average
7	The training materials provided in the in the vocational English program are appropriate to the students' level of English.	178	3.50	1.18	Average
8	The training materials provided in the in the vocational English program are usually clear, interesting and nicely printed.	178	3.50	1.18	Average

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

9	The training materials provided in the in the vocational English program can be easily obtained by all the students.	178	3.00	1.33	Average

The above table shows the teachers' perceptions of the *second* domain which is '*the training materials'* of the ESP training program, (items: 6 – 9) in descending order. As can be seen in the table the teachers were not very much satisfied with the training materials provided for the trainees as they gave them 'average' scores that range between 3.6 for the highest item and 3.0 for the lowest.

Table (06)

The Teachers' Perceptions of Training in the ESP Training Program at the Institutes of Vocational Training in Algeria

No.	**Competencies**	**N**	**Mean**	**Std. Dev**	**Level**
10	I am very well aware of my students' individual differences and needs, and adapt my teaching accordingly	178	4.40	0.70	High
11	I always talk to my students in the vocational English program in simple and clear English.	178	4.10	0.57	High

12	I always use effective teaching techniques that help my students in the vocational English program to understand the lessons more easily.	178	3.70	0.95	High
13	I prepare my lessons carefully and regularly, and can deal with any teaching problem easily and successfully.	178	3.70	0.95	High
14	I can always provide my students in the vocational English program with good knowledge of the subject they study such as that related to accounting, management,…etc.	178	3.60	0.84	Average

Table (06) shows the details of the teachers' responses to the third category, *'the trainer or training'* of the ESP Training Program at the Institutes of Vocational Training in Algeria (items: 10 - 14) in descending order. This table shows that most teachers are very much satisfied with the 'training of the ESP as many of them gave high scores to four items of five, with the highest score given to *'being aware of the students' individual differences and needs, and adapt my teaching accordingly'* (M = 4.4) and the lowest score to *'providing students in the vocational English program with good knowledge of the subject they study such as that related to accounting, management,…etc*.' (M = 3.6)

Table (07)

The Trainers' Perceptions of the Evaluation of the Trainees in the ESP Training Program at the Institutes of Vocational Training in Algeria

No.	Competencies	N	Mean	Std. Dev	Level
15	I provide my students in the vocational English program with summative assessment at the end of the program.	178	4.50	0.53	High
16	The tests that I give to my trainees in the vocational English program, to a great extent, reflect what they need and what they are actually learning in the program	178	4.00	0.00	High
17	The tests that I give to my trainees in the vocational English program are suitable to levels and abilities of these trainees.	178	3.90	0.32	High
18	I always provide continuous assessment to my students and give them useful feedback about their progress during the lessons.	178	2.40	1.17	Average

Table (07) shows the details of the teachers' responses to the fourth category, *'evaluation and assessment'* of the ESP Training Program at the Institutes of Vocational Training in Algeria (items: 15 - 18) in descending order. This table shows that teachers are very much satisfied with the 'assessment and evaluation' implemented at the ESP training program as many of them gave high scores to three items out of four, with the highest score given to *'providing students in the vocational English program with summative assessment at the end of the program'* (M = 4.5) and

the lowest score to *'providing* continuous assessment to my students and give them useful feedback about their progress during the lessons.' (M = 2.4) which is clearly very low when compared to the rest of scores given to the other items.

Table (08)

The Trainers' Perceptions of the Aids, Facilities and Technology Provided in the ESP Training Program at the Institutes of Vocational Training in Algeria

Item No.	Competencies	N	Mean	Std. Dev	Level
19	The training rooms in the institute where I teach are adequate and the number of students in each room is appropriate.	178	3.50	1.18	Average
20	The training rooms in the institute where I teach are equipped with basic facilities such as comfortable desks, and modern aids (i.e. smart boards, projectors…etc.)	178	3.00	1.05	Average
21	I am well aware of the use modern technology in teaching such as computers, videos, tape-recorders…etc and use it in many of my lessons.	178	2.90	1.60	Average
22	The institute where I teach provides the trainees with all the learning resources they need such dictionaries, reference books, audio materials, and audio-visual materials…etc.	178	1.90	1.20	Low

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

Table (08) shows the details of the teachers' responses to the fifth category, *'aids,* facilities and technology' provided for the trainees in the ESP training program at the Institutes of Vocational Training in Algeria (items: 19 - 22) in descending order. This table shows that most teachers are not satisfied with the 'training of the ESP as many of them gave low scores to three items out of four, with the highest score given to *'the training rooms in the institute are adequate and the number of students in each room is appropriate'* (M = 3.5) and the lowest score to *'providing the trainees with all the learning resources they need such dictionaries, reference books, audio materials, and audio-visual materials…etc.'* (M = 1.9).

4.2. Summary of the Results:

This study attempted to evaluate the training needs of the English teachers in the Vocational Institutes considering different perceptions of the training program. The study evaluated different aspects of the ESP training program, namely its aims and objectives, the trainers, the training materials, evaluation and assessment techniques and aids and facilities provided for the learners. The results of the study have shown that the teachers were dissatisfied with the aspects of the training programs, though their perceptions of three areas of the program, namely 'training materials', 'the trainers', and 'evaluation and assessment' were higher.

5. Discussion of the Results:

The present study aimed at evaluating the ESP training program in the vocational institutes in Algeria. The researcher mainly investigated the teachers' needs in the ESP training programs at the vocational institutes in Algeria.

The study investigated five different aspects of the training program provided for the teachers in a number of vocational institutes focusing mainly on 'the aims and objectives of the program', 'the trainers', 'the training materials', 'assessment strategies implemented', and the 'aids and facilities' provided by these institutes to enhance learning and teaching of English.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

The results of the survey have shown that the teachers were dissatisfied with the training program in at least two areas, namely 'the training materials' and 'aids and facilities' provided by the institutes of vocational training.

However, the teachers were less critical about 'assessment and evaluation' and the teaching methods implemented represented by 'the trainers' domain, as these are supposed to be their own responsibility. Furthermore, the ratings given to these areas are not too high, which means that the teachers still feel that they need some help here, probably because many of them do not have a vocational background which could be of some help when they need to explain language which is sometimes difficult for the teachers themselves.

Moreover, the results of the study show clearly that the ESP program implemented in the vocational institutes in Algeria must be thoroughly reviewed, and mainly in a number of areas as indicated by the teachers.

These findings of this research, in fact, are supported by other related studies in the field which investigated similar programs and had similar results. The results of the present study agree with many of these studies that many ESP programs had deficiencies and weakness. (For example, Abu Zahra and Shayeb, 2004; Alharby, 2005; Alhuqbani, 2008)

Despite the fact that some of these studies used different approaches to the problem and used different instruments such as observation scales, interviews, many researchers share their worries about the teaching of English for specific purposes and the effectiveness of many ESP programs in general (Abu Zahra and Shayeb, 2004; Dakhmouche, 2008; Maleki, 2009; Javdani et al, 2011)

5.2. Pedagogical Implications:

This study which mainly aimed at investigating the ESP training needs of the teachers at the vocational institutes in Algeria provided useful information about the ESP program in the country and the needs of the teachers in a number of areas, namely the aims and objectives of the program, the training materials offered to the learners, the trainers, the evaluation and assessment techniques

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

implemented there and the kind of facilities provided to enhance teaching and learning of the language.

The study also gave useful information about the trainers in order to help researchers interested in making further research on evaluating ESP programs in the country.

Moreover, the methodology and instruments implemented in the study provided useful tools for the evaluation of other ESP programs in the country or in any similar contexts.

5.3. Recommendations:

- Conduct more studies on the evaluation of ESP training programs in other areas of the country.
- conduct more studies on ESP taking the different aspects of the program into consideration (such as: material, goals, the different aid and technologic material, teacher training)
- Conduct more studies on ESP that include more disciplines and specializations in other institutes of vocational training.
- The teachers should increase their knowledge of vocational language in general
- The teachers should inform the people concerned about their actual needs to be considered in the future plans of English language teacher training programs as well.
- The Ministry of Vocational Training and Apprenticeship should be aware of the trainees' needs; this should also be prior before developing any ESP program.
- The ESP courses should not be considered as a single project or selected to be taught for one or two semesters, but they should be well organized a long term curriculum
- The socio-cultural environment and the political and economic situation of the Algerian society should be taken into consideration in the design of ESP programs.
- Materials, aids and technological facilities should be available in the different IVT in Algeria to allow the trainees to better improve their English.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

Conclusion:

The situation of teaching ESP in the IVT in Algeria has received very little attention by the people concerned (syllabus designers, MVTA, trainers, trainees,..). The present study was conducted as a way to investigate the effectiveness of the training program for teaching English at the IVT in Algeria in terms of the aims and objectives of the program, the materials used, the methods of teaching implemented, the assessment techniques and aids and facilities provided.

The results obtained from the questionnaire directed to the trainers have shown that the teachers were dissatisfied with the training program. The trainers were less critical about the program in some aspects namely assessment techniques which is their responsibility even though the training rating was not too high which means that they were not very satisfied with the English program taught in the IVT.

To conclude, we can say that the training program for teaching English at the IVT in Algeria should be thoroughly reviewed in some areas as shown by the trainers.

Bibliography:

- Alderson, J. K. (1992). Guidelines for Evaluation of Second Language Education. In J. C. Anderson and A. Beretta (Eds.). *Evaluating Second Language Education*. Cambridge : Cambridge University Press.
- Anderson, J. K. (1992). Guidelines for Evaluation of Second Language Education. In J. C. Anderson and A. Beretta (Eds.). Evaluating Second Language Education. (pp: 274-304). Cambridge: Cambridge University Press.
- Anderson, T. (1998). Do we Want Certified Teachers or Qualified Ones? Modern Language Journal, 4, 231-235
- Anthony, L. (1998). Defining English for Specific Purposes and the Role of the ESP Practitioner: Proceedings of the Japan Conference on English for Specific Purposes. Retrieved 15/01/2012 from: www.antlab.sci.waseda.ac.jp
- Harmer, J. (1998). How to teach English: An introduction to the practice of English language teaching. Edinburgh Gate, Harlow, England: Addison Wesley Longman. Hyland, K. Writing and teaching writing .
- Harmer,J. (2007). The Practice of English Language Teaching. England: Longman .
- Hutchinson, T. & A. Waters, (1978). *English for Specific Purposes.* A *Learning Centered Approach*. Cambridge: Cambridge University Press.
- Hutchinson, T. (1987). Making materials work in the ESP classroom. In D. Chamberlain & R. J. Baumgardner (Eds.), ESP in the Classroom. Practice and Evaluation (pp. 71-75). London: Macmillan.
- Macklay, R. and Mountford, A. (1978). English for Specific Purpose, eds. London: Longman.
- Robinson, P. C. (1991). *ESP Today: a Practitioner's Guide.* New York: Prentice Hall.

- Robinson, B. (2003). Evaluation, Research and Quality. In Robinson, B. and Latchem, C. (Eds.), *Teacher Education through Open and Distance Learning* (pp. 193–211). London: Routledge/Farmer.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

project completion status

وضعية إنجاز مشروع

صليحة لالوش

saliha.lallouche@univ-alger2.dz

جامعة الجزائر (2) أبو القاسم سعد الله، بوزريعة –كلية العلوم الاجتماعية– قسم علوم التربية

2022

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

Received |27|07|2022 – Accepted 28|09|2022 – Available online 15|10|2022

ABSTRACT

The concept of project status is one of the important and interesting concepts that scholars have addressed through literature, research, and educational studies. The contributions have been many and varied to determine this subject, which has become one of the modern educational pedagogies suitable for strengthening the capacities, abilities and skills of learners, which are determined in the process of continuous learning, with the aim of expand their knowledge, acquire research methods and application skills, and employ their learning, and what we mean in the context of this research is talk about the progress of the project from concept, goals and targeted skills, their characteristics and benefits, and the stages of their achievement, and there is no doubt that the most significant controversy we face is our extrapolation of this type of research, which took on meaning beyond the boundaries of the classroom by directing the gaze of learners outwards, within the framework of real, realistic, intentional situations and systematics called project completion status.

Keywords: Status; Project, Project completion status.

الملخص

يُعدُّ مفهوم وضعية إنجاز مشروع من المفاهيم الهامة المثيرة للاهتمام و التي تناولها الباحثون مِنْ خِلال المؤلفات التربوية والأبحاث والدراسات، فكانت إسهامات عديدة ومتنوعة في تحديد هذا الموضوع الذي أضحي من البيداغوجيات التربوية الحديثة الملائمة لبناء القدرات و المهارات و الكفاءات لدى المتعلمين ، و التي تتحدّد في سيرورة تعلم مستمر، بهدف توسيع معارفهم، واكتساب طرائق البحث ومهارات التطبيق، وتوظيف معوماتهم ، و الذي نتقصده في سياق هذا البحث هو الحديث عن وضعية إنجاز مشروع من مفهوم، وأهداف وكفاءات مُستهدفة، وخصائصها ومميزاتها، ومراحل وخطوات إنجازها، و لا شك أن أهم جدل نواجههُ هو استقرائنا لهذا النوع من البحوث الذي أصبح مغزى يتجاوز حدود الصف الدراسي بتوجيه رؤية المتعلمين نحو العالم الخارجي، في إطار وضعيات حقيقية وواقعية وهادفة ومنهجية تُسمّى وضعية إنجاز مشروع.

الكلمات المفتاحية: وضعية، مشروع، وضعية إنجاز مشروع

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

1.Introduction:

Most of today communities face challenges in different fields of life, either the economic field or the social, political, cultural, medical and educational fields. These challenges have imposed entering modern work methods in many educational foundations in order to be up-to-date with these challenges. Therefore, the different educational systems all over the world have witnessed inclusive reforms to develop school and make it adapt to modern and fast updates and techniques in the light of globalization spread. The realization of this objective requires a radical change in the educational performance types, reviewing the pedagogical practices concerning education, planning and reform, posing new work methods, finding effective and constructive status that aim to the knowledge self-building, , in addition to the self-acquisition of behaviors, orientations, attitudes and skills, so that the learner learns the learning method, which means transferring from the education logic based on knowledge to the learning logic based on the learner that is considered as an axe as well as an active and fundamental element in the educational activity generally and in the educational-learning process particularly.

Among the status that confirm this construction and transfer we find the project completion status, which represents the most important international educational pedagogies that are effective and active and that has a great propagation in the international educational systems, where it is advised to adopt this pedagogy during the educational-learning process. Furthermore, modern methodologies have focused on this pedagogy, posing educational purposes for it, considering that it works on developing the practical style skill of thinking, and that it aims to form the learner's personality and to help him get used to depend on himself, being as a "unique educational style centered on the learner, while the teacher's role is limited to supervising, guiding and helping when needed... It is a natural and spontaneous activity executed by the pupils to realize real wanted purposes in a social realistic atmosphere and in circumstances that are similar to normal life circumstances" (Nabahate, Yahia Mohamed, 2008, p. 99).

2. Research objectives:

In order to determine the theoretical rooting of the project completion status, we propose this research paper to represent a theoretical frame that determines the project completion status definition, historical development, objectives, target competencies, characteristics and stages, depending on the different researchers' opinions, using the educational literature and the theoretical heritage, as well as what was written about the topic, and depending also on the descriptive methodology that is considered as a way to get accurate and clear information, in addition to classifying them and attempting to expose, analyze, discuss and explain them in order to recognize the nature of the project completion status, note that this research derives its importance from the studied topic itself, because the topics related to educational-learning process

imposed themselves in different fields of research and discussion that are one of the most important axes of researchers and educators activity, which urges us to search and investigate within this topic.

3. Research problem

Undoubtedly, educational literature has determined many callings for the project represented in: “approach by the project”, “the project purpose”, “the pedagogical project”, “the project pedagogy”, “learning by projects”, “project completion status”, “the learner’s project” and “the learning by project status”.

The most important thing in all these callings is “the project’s contribution in the learner’s training… (la contribution du projet à la formation de l’apprenant…), and the project completion status makes education real (prend partie pour l’enseignement de l’apprentissage dans l’action)” (Proulx, 2008, p. 6.10)in addition to giving meaning to knowledge and realities, therefore, acquiring the competence that is considered as: « the ability to face situations, and we cannot visualize competencies without any status, because they are the ones that make the competence as a function not an attitude” (Ahmed, 2007, p. 66)From this point, we add the word “status” to the word “project”, because “realizing a project is a status or a path towards the solution beyond the target product” (Ministry, 2009, p. 20) considering that “the status pedagogy forms and determines the knowledge place at work” (Bebbouchi-Fekkar, 2009, p. 99) “Therefore, it is a status that is exemplified through achieving a project that puts the learner in conflicting situations, which enables him to think and proof in order to realize learning by means of his own efforts. This process requires putting the learner in a real status for experiment and in a continuous desired activity. The status includes, on the other hand, a real problem that excites, motivates and interests him, so that he achieves good results that please his inclinations” (Ministry, The National Education, 2011, p. 58) which reflects positively on the achievement of clear and determined educational and behavioral objectives, as educational desired results.

From this point, the project completion status is considered as one of the applied images of the learning by activities method that is centered on the learner, and it also represents one of the most important modern educational methods that witness a great propagation within the international educational systems, because it aims to form the learner’s personality and make him get used to self-dependence while studying problems and thinking about finding solutions.

In this context, it was mentioned in the educational literature published in the educational and pedagogical school context, in addition to many researches and studies, such as “Schunk study”, Aby Yaznak (2009), that the project completion status is considered as coordinated inputs by a group of participants for a determined period, where a determined amount of resources is used

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

in order to allow the achievement of the objectives that aim to improve the community situations or a determined reality when we transform these resources to activities through a particular way (Schunk, Aby Yaznak, 2009, p. 3). Moreover, Jean Proulx study (2004) has affirmed that these resources are “a regular process for the knowledge acquisition and transformation, through which the learner is capable of expecting, planning and realizing in a determined period, either alone or with his peers. This process is achieved by the teacher’s orientation within a pedagogical productive and evaluable context” (Proulx, Jean, 2008, p. 31).

However, Mohsin Ali Atiaة study (2009) has revealed that “the project completion status is in line with the activity method, because it makes learners learn by work, so they live in schools a natural life based on their personal activity” (Atia, 2009, p. 416).

In addition to that, Maggy Pierret and Hannecart Patrick study (2006) has shown that the project completion status “includes three fundamental elements: a production that can be observed, the collective situation of this production, from its conception to its realization and evaluation, and the useful character of this production for those who want it” (Maggy Pierret, 2006, p. 73).

Accordingly, this research derives its importance from the nature of the topic we are dealing with, which prompted us to choose it as it deals with an important field of the educational-learning process. A change in educational approaches, which led to the intensification of efforts, and the multiplicity of studies and research in this field represented in the status of the project’s completion, and accordingly, the research problem can be summarized by asking the following questions:

- What is the definition of status and project?
- What is the definition of the project completion status?
- What is the historical development of the project completion status?
- What are its objectives, target competencies and characteristics?
- What are the stages of realizing the project completion status?

4.The conceptual frame:

4.1.: The “status” definition: The status is “a set of circumstances that put the concerned person in front of a task or tasks that he must complete. In other words, the status suggests a cognitive challenge for the learner, where he employs his abilities to treat the problematic or solve the posed problem, so he acquires competencies that allow him build his knowledge” (Rogers, 2000, p. 126)

4.2.The “project” definition: The project is defined as “a unique educational style centered on the learner, while the teacher’s role is limited to supervising, guiding and helping when needed... It is a natural and spontaneous activity executed by the pupils to realize real wanted purposes in a social realistic atmosphere and in circumstances that are similar to normal life circumstances” (Nabahate ،2008 ،p. 99) While M. Assakrane (1989) defined it as “a planning that the individual intends to do in order to realize a particular purpose, either he was alone or collaborating with

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

others" (Assakrane, 1989, p. 139) . Moreover, M. Pierret et. al (2006) refer that "the project is a determined work that is achieved collectively. It requires the group's approval and recruitment, because it results from a collective will based on desires that lead to a concrete result, which is material and can be promoted, with great benefit overseas". It is also "a field work practiced by the pupil or a group of pupils, characterized with a practical feature and achieved under the teacher's supervision, and it is a purposeful field that serves the scientific material in a social environment" (Bournane, p. 46)Furthermore, the project represents "the deliberative efficiency that happens in a social environment, which is connected to the life of individuals" (Abdullah, p. 89). In addition to that, it is incarnated in "establishing practical designs for theories, hypotheses and knowledge through making plans that make us reach the wanted target, which is the knowledge incarnation, with scientific, useful and social benefit" (Amimire, 2005) .

4.3 .The "project completion status" definition:

K. D. Henni (2005) has defined the project completion status as "a pedagogical process that aims to reach a set of learnings, starting from the status lived by the learner. In other words, learning through projects starts from its pedagogical conception, and it considers the learner as a person that should build his knowledge in a better way through the objectives that he determines for himself and that characterize his different activities" (Hanni, 2005, p. 158). The project completion status is also defined as: "the educational act completion method, where the pupil recruits himself and finds a meaning for his learnings within a production that has a social dimension that raises its value" (Huber, 2005, p. 18)

- While R. Arzile and Hassounate (2002) both defined the project completion status as "a work plan whose construction is elaborated and execution procedures are designed starting from confined datum and determined problematic; in order to establish a strategy with milestones that treat a set of expected difficulties to achieve a better profitability" (Ramadane Arzile, 2002, p. 124). (Ramadane Arzile, Mohamed Hassounate ‹2002 ‹p. 124) Therefore, the project completion status is "before everything, realizing a concrete production that is a tool for a social adaptation outside the training group. This social adaptation changes the environment in some of its social, economic, cultural and political dimensions, according to the nature of the project" (Huber, 2005, p. 19).

With a closer analytical look, we conclude that:

- The project completion status is one of the modern teaching methods.
- Depending on the realization of determined and oriented works by the educational foundation.
- Depending on the pedagogical practice and activity.
- An educational-learning process for the benefit of the learner is established through the teacher's orientation.
- The project is a pedagogical activity and a methodological design based on work and practice. It permits the enlargement of the learner's knowledge.
- The learner acquires application skills.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

- The learner has the chance to behave and work in a collaborative and collective way in the frame of real and purposeful status named the project completion status.

From this point, we add the word “status” to the word “project”, considering that “realizing a project in the approach by competencies is a status or a path towards the solution, which is beyond the target product”. (Ministry, 2009, p. 20).

We conclude that, from Philippe Perrenoud point of view, the project completion status is “a collective foundation managed by the classroom team, where the teacher plays the role of the animator, however, he does not decide everything. It is directed towards a real (observed) production by merging a set of tasks in which the pupils interfere and play the role of an actor in a various way, according to the tools and interests. This method requires learning the actual knowledge of the project (making decisions, planning, coordinating …). It also confirms the instructions that can be determined and that exists in the different materials’ methodologies” (Bournane, p. 46).

5.The historical development of the project completion status:

The project thought is due to educators who emerged during the eighteenth and the nineteenth century, such as the educator John Jack Rousseau (1712-1778), and all the educators who came after him, such as the Swiss Johann Henry Pestalozzi (1746-1827), then the German educator Frederick Wilhelm August Fruebel (1782-1825) who set the book “Educating the human”, where he called for the necessity of learning through work. Moreover, “the first who used the project method is the American educator Charles Richard, the Handicrafts Head of Department at the Columbia University Teachers’ Faculty in 1900. In 1908, the teacher John Stevenson used the project method in teaching the agricultural sciences in one of the professional schools in the United States of America. In 1918, the Belgian William Culpatrick adopted John Dewey’s opinions and educational philosophy, so he held on to the project method after studying and searching it. Culpatrick had made intense efforts and worked on simplifying it for the teachers, which helped raising its fame and propagation in all the countries of the world” (Annafati, 2002, p. 145). Note that he started from John Dewey’s thoughts that “appeared in a new form by William Culpatrick, and were called the projects method” (Abou Taleb Mohamed Assaid, 2001, p. 123), who established and founded it. “This method is considered as a revolution on the traditional methods based on stuffing minds with knowledge and information as well as the pupil’s negativity… It is then an educational attitude that stems from the learners’ real desire to treat any problem or situation in front of them” (Annafati, Tahar Ali, 2002, p. 146).

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

6.Objectives of the project completion status:

Philippe Perrenoud considered that the project completion status is "the backbone of the project pedagogy, as a method for knowledge building inside the classroom". According to Perrenoud, the project aims to:

- Use and recruit knowledge and actual acquired knowledge, and build competencies.
- Highlight social behaviors that develop the knowledge and learnings' significance.
- Discover new knowledge and worlds for the sake of awareness and motivation.
- Put the learners in front of obstacles that they can only exceed by new learnings outside the project.
- Update new learnings in the frame of the project.
- Permit the acquisitions and shortcomings determination during academic and self-evaluation.
- Develop collaboration and collective intelligence.
- Help every learner to acquire self-confidence, evaluate personal and collective identity through a form of leadership, and take the lead.
- Develop independence and the ability to adopt choices and discussing them.
- Set trainings considering elaboration and management projects.
- Develop the pupils' information, actual skills, perceptions and the knowledge application method in all life fields.
- Treat topics and problems practically in order to develop subjective and critical thinking, as well as the ability to solve problems, which make us acquire knowledge and expertise.
    - "The knowledge self-acquisition" (Bournane, p. 47.49).

- "The –we learn how you learn- project… essentially aims to help the pupil develop his ability to organize his knowledge and his personal work and to bear his school success responsibility, so that if he knew how to think, he will be able to acquire an intellectual independence" (Abdulsalam, 2005, p. 52).

In addition to that, we conclude that the learning by project status permits reducing the gap between school and the learner's environment, by means of practice, attitude and collaborative individual work as learning tools in the frame of real, purposeful and realistic status that take place within a social environment. Therefore, these statuses aim to realize a set of objectives, including:

- "The project objective must be as a reality control, which leads to a real social confession, and the project must have an effect on the environment, bringing a tangible evidence to acquiring knowledge and new actual knowledge. This activity produces, in the environment, a social confession that raises the trainee value, provides him with self-confidence and convinces him that he is able to gain more complicated acquisitions" (Maggy Pierret, 2006, p. 41.42).

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

- "Making the learners responsible for their learning and involving them in a continuous learning process".
- Considering the individual differences in the work methodology, and using the group in order to build and develop knowledge.
- Giving a significance to the activities proposed to pupils.
- Developing the pupils' relational abilities, because realizing projects allows them to exchange points of view, to accept them, to collaborate, to match make their individual needs and the group needs, and to develop their critical thinking (Ministry ،2001 ،p. 13).
-
- "They are employed and invested in the orientation of their vision towards the external world".
- "Animating their reality and social environment while facing different and various situations" (Abdullatif, 2009, p. 43).
- "They don't only concern the classroom activities, being a mere simple orientation or integration tool, but they represent the path towards the individual's independence, which makes the learner decide his life style for instance" (Hadji, 2006, p. 09).
- "Building the learner's personality by making him get used to depend on himself while studying problems and working on finding solutions for them".
- The project completion status represents one of the competencies integration tributaries, because the project is a set of tasks that are performed by the learner in order to activate his acquisitions, establish them and recruit his skills while facing the formed status, which represents the educational context where a set of competencies is functionally integrated. These competencies enable the learner to continue his learning or professional training".
- They represent an objective that is included in the perspective of adding vivacity to the material, and preparing the learner for bearing life responsibilities effectively in the future. In addition to that, and through training the learner to create small projects and realize them, he establishes a tradition that is applied from the ambition idea to the big projects planning in the future.
- "They push the learner to the spirit of initiative and independence and encourage him to choose his work topic by himself or within a group. They also urge him to search and react with others using different tools and methods" (Bournane, p. 48). Depending on the objectives, many target competencies are determined in the project completion status.

7.The target competencies through the project completion status:

The project achieves a set of target competencies, which are as follows:

- "Exploiting information by organizing their research, then getting information and benefiting from them".
- Solving problems by imagining the status elements and testing possible solutions, then adopting a flexible method.
- Practicing critical judgment by building opinions and expressing them, then considering them relatively.
- Employing creative thinking through elements that are related to status, and by exploiting then adopting a flexible method.
- Adopting effective work methods by observing the whole project and adjusting the method then analyzing it.
- Exploiting information and communication technology by getting technologies and putting them in the service of instructions, then evaluating their usage efficiency.
- Improving abilities by recognizing personal characteristics: taking position between others and then benefiting from the personal materials.
- Collaboration: by contributing to collaborative work and double-dealing with an open spirit, then evaluating participation in the collaborative work.
- "Communicating appropriately by managing the intervention and getting various expression methods, then adopting the appropriate communication style" (Bournane, p. 48).

8.Projects' types and classification:

The project completion status incarnates the practice principle inside or outside school in order to link the theoretical aspect to the practical one. Therefore, the projects that the teacher proposes for his learners are classified within many categories, such as:

- **According to collective and individual projects:**
- **Collective projects:** They aim to engage all the learners to accomplish one work, which may be represented in creating a school garden or poultry farming, or a beekeeping field, organizing an exposition, founding an association, elaborating a scientific experiment, or publishing a magazine, and other projects that require collective work.
- **Individual projects:** They aim to accomplish the same work by every individual in the classroom according to his personal abilities, such as elaborating individual reports or abstracts for some books, setting a proposed plan for some projects execution… or executing an individual project by every learner, a project that is different from the set of other projects, which are determined by the teacher or the learners, or the learner himself.
- **According to the knowledge fields:**
- Scientific projects (physical, life projects, chemical, computer projects, and others…).
- Social projects (historical, geographical, community projects, and others…).
- Economic projects (commercial, agricultural, industrial…).

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

- Artistic projects (design work, painting a picture, road on copper…).
- Sports projects (collective and individual sport games, such as: a basketball team or running competitions…).
- **According to the work type:**
- Entertainment projects (artistic plays or singing festivals…).
- Problems' projects (solving intellectual, social, or work problems).
- Composing and building projects, where the practical dimension dominates, such as engineering projects, or designing educational tools, or poultry farming, and others.
- Projects for teaching some cognitive or physical skills, such as writing scientific reports and other researches, summarizing some books and articles, establishing football or swimming teams, and others (Alfatlawi, 2006, p. 397)().

In this context, we propose some examples for that, depending on what many researchers had noted, including the researcher Abdulaziz Amimire (2005), in addition to the conclusions of the previous researcher, note that, for example, in the civil education material, we find that there are many and various projects' topics, including:

- Preparing researches that are related to educational units, such as:
- Elaborating a school magazine.
- Writing work session minutes.
- Elaborating an artistic card while visiting a factory or a museum.
- Elaborating telegrams and money orders, and filling some topics.
- Filling a postal check.
- Creating a stories and games' club.
- Elaborating procedural, practical and field researches concerning environment and preserving it, where the learner deals directly with the external society, and where he is the fundamental in the civil education learning, because "charging the student to prepare researches about the environment questions makes them participate actively in collecting information, tabulating, organizing, analyzing them and extracting the necessary recommendations in light of their analysis, while they can benefit from the field visits in order to link them to practical researches about many environmental questions" (Alayasra, 2012, p. 411), in order to confirm new concepts through the applied and practical participation.
- Making mini figures for particular realizations, such as making elections' box.

In addition to that, all these types perform many functions, which are:

- **The economic and productive function:** It requires building a work (an objective to enlarge tools and distribute financial used helps).
- **The therapeutic function:** It renews the learners' interest in school, allows them to start a significant activity and understand matters either by learning or through social and professional life.
- **The educational function:** Where the pedagogical practices are joint in view of their treatment of new knowledge and in view of objectives.

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

- **The social and environmental function:** Where every progress has a direct or an indirect reference with the partners.
- **The political function:** Where the project pedagogy becomes a purpose for education and not only a tool. In that case, it performs the task of training the citizen according to the effective participation perspective in public life (Tridi, 2010, p. 83). However, The National Education Ministry has referred to:
- **Educational functions:** Where the learner, through this comparison, invests and exploits his knowledge and former acquisitions, in addition to employing them to realize desired competencies after achieving the pedagogical project.
- **Social functions:** Through the learner's contribution in the pedagogical projects' realization and elaboration, either the project was individual or collective. The learner receives a qualitative training that qualifies him to face all what he meets outside school, because he becomes a mature citizen who enjoys independence and the ability to face all kinds of situations.
- **Awareness and motivation functions:** Thanks to the project pedagogy, the learner realizes the educational-learning act objectives and importance, which is capable of raising the learner's morale, push him to study and encourage him to continue his educational act (The National Education Ministry, 2005, p. 14).

Therefore, "this pedagogy depends on encouraging learners to discover, question and search solutions for complicated issues. It also encourages the learner's knowledge cycle enlargement from the abstract to the concrete and from the theoretical to the practical" (Ministry, The National Education, 2011, p. 57).. The nature of activities that are included in the educational-learning act "is related to work, human relations, everyday life, cultural and material products… They come all down to prepare the learner for the social reality that is yet to come, or to complete his knowledge within the local, national or international environment" (Hadji, 2006, p. 22). The learner acquire then actual knowledge and competencies, incarnating entertainment, desire and motivation.

9.The project completion status characteristics:

- It is considered as an extension of the foundation project.
- "It determines the actual posed problematic at the department, and answers them through a set of organized operations".
- It is subject to projects' designs and arrangements.
- It is based on comparing the methodologies components as well as the teachers' abilities, preparations and reality.
- It includes the graduation, training and suitability conditions.
- It is applicable, evaluable, supportable and followable (Ramadane Arzile, Mohamed Hassounate, 2002, p. 124).

-

Starting from this direction, the learner aims, by achieving learning, to work on joining real social practices, accompanied with his peers in learning participation, which means that the learner possesses now abilities and skills, therefore, a self-generated competence. Moreover, the principles on which the project completion status depends can be summarized as follows:

- “Determining the status on which every educational act is based.
- Structuralizing the instructions to make the answer turn around the new problematic.
- Investing the processes effectively in order to achieve the acquired instructions” (Hanni, 2005, p. 159).

The project completion status was approved by The National Education Ministry in Algeria concerning its methodologies, and it was considered as:

- “A collective work managed by the group or the classroom, where the learner is in charge of animation, yet he does not decide everything.
- He aims for a concrete production (in the word’s large meaning, which means a text, a paper, an exposition, a model, a map, a scientific experiment, an artistic creativity or a traditional industry, an investigation, a tour, a competition, a game…).
- Inserting a set of tasks where all the pupils can participate and play active various roles according to their potentials and inclinations.
- Raising the knowledge learning and the projects’ management skill” (making decisions, planning, coordinating…).
- Giving priority to showable instructions (at least after the operation) included in a studying program of an educational material or many materials” (Ministry, 2009, p. 20) . For that reason, those instructions are characterized with many features, which are as follows:
- “They are considered as the best method of independent thinking and autonomous mental education” (Alabrachi, 1993, p. 280).
- “They make the students get used to organized research, either in schools or outside them.
- On the other hand, they make the students get used to collaborative learning in which they participate, each according to his abilities.
- In the project method, the conditions in which individual differences appear are produced.
- They raise curiosity in the student, as well as the feeling of responsibility and self-confidence.
- They make the student get used to link sight to work, and thinking to practice.
- They reinforce in the student the ability to work and the self-activity.
- They help adjusting the learner’s attitude to be better.
- They make the student get used to love collaboration and collective purposeful work” (Nabahate, Yahia Mohamed, 2008, p. 100) .
- They permit to pupils the chance to learn through work and activity, to acquire new expertise and to communicate with the society.

- They achieve bonding between the different attitudes of social studies on one hand, and between social studies and other studying materials on the other hand, which leads to the information and thoughts bonding and integration.
- They consider the pupils' inclinations, interests and needs, which raises their excitement for learning and reflects positively on realizing the objectives of teaching social studies.
- They enable the pupils to employ data and information that they acquired in their everyday life, and to realize the exchanged relationship between school, with its studying programs, and the society that surrounds it.
  - They develop the collaboration spirit among students by performing, in groups, their charged tasks concerning the project execution, which reflects positively on developing some social skills, especially the collaboration skills among pupils" (Mansour Ahmed Abdelmanaam, 2002, p. 105.106).

- They make school life a part of social life and develop the collaboration and goodwill spirit among pupils.
- "They permit to pupils the chance to get information using their personal effort and organized thinking, and they also help them renovate and behave appropriately while solving problems.
- They link the studying materials with each other and collect them around one topic" (Ministry, The National Education, 2011, p. 14)
- "They work on involving them in real social practices.
- They decrease the gap between school and the pupil's vital environment" ((Bournane, p. 48).

10.The project completion status steps and stages:

Before starting the project completion and the work, we should "determine the fundamental elements, which are:

- The project objective.
- The works' list or groups.
- The expected time for every work's realization.
- The beginning work that precedes all works.
- The final work that is not followed by any other work.
- A table that adjusts every work's necessary conditions.

The fundamental point of the project status is "choosing the project and framing a plan before starting it, then executing and evaluating it. Therefore, if we succeed in this step, we rest assured of the educational productions" (Djamel, Abderrahmane Abdulsalam, 2000, p. 150), which the project status aims to achieve. For that reason, the project completion status requires to follow steps that are determined by The National Education Ministry as follows:

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

- **The first step: The project elaboration:** (Assigning the beneficiaries, choosing the topic, choosing the field, the intervention frame, determining the work period and the necessary conditions for that, as well as elaborating the steps financially).
- **The second step: The project birth:** (An initial approach to the project, collecting information, the feeling, the reactions and the inquiries).
- Emerging the problematic: Highlighting the possible projects in order to choose one of them unanimously.
- **The third step: The project structuralism:** Auditing the project content (negotiations, rephrasing, in addition to collective and individual clarifications).
- The project planning: (Programing tasks, the necessary tools and distributing work to the participants).
- **The forth step: The project launch:** Accomplishing the expected realizations by the team (reviewing, the final report and other realizations). This may require making modifications on basic objectives or programing new tasks…etc.
- **The fifth step: The results display:** The team's expositions of his works' results to the other team or the special public, where the research is appreciated.
- **The sixth step: Evaluation:** As an analysis of the objective and an evaluation of the production (of the learners, the accompanying team, the environment and the social context).
- **The seventh step: The project position:** Recognizing the project proceedings, the reactions and the field results.

What we confirm in these steps is that the project is determined "before starting the work and it is not created piecemeal, neither by the teacher nor the pupils, according to the realization advance, thinking that this may be an evidence of liberty and initiative, but the intended instructions in the project, the necessary tools of its construction and the time it takes must all be lined. Moreover, the project must be managed firmly so that it won't take long to be achieved and won't get out of the teachers' and pupils' control who "will lose hope of finishing it, and may get tired or bored" (Abdulsalam, 2005, p. 60).

Therefore, the project needs steps that must be followed, which are as follows:

- **Choosing the project:** The students choose a particular project with the teacher's orientation and in the light of their potentials and environment. In this choice, they must consider the project's capacity to be realized and suitability to the pupils' inclinations, interests, orientations and mental level. It is preferred that the pupils pose many projects, while the teacher should help them choose the best project according to the desired objectives and the environment's potentials.

- **Setting a plan for the project's execution:** Where the teacher reunites with the pupils in order to set a time plan for the project's realization, in addition to setting the aspects that must be executed in each time step, registering, revising and discussing this plan, determining every pupil's role in the classroom while executing the project's different steps, or each group's role in case of

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

dividing the pupils to groups, as well as determining a leader for each group in order to supervise the operation of executing its charged tasks.

- **Executing the project:** Where the pupils work and activate to realize their objective from studying the project. This step starts with collecting, organizing and registering data and information, as well as writing notes, acquiring expertise and performing the necessary works for the project's execution. Through the project's realization, the pupils acquire the self-dependence skills, critical thinking and explaining events. In this step, the teacher is engaged to the guidance role, in addition to controlling the execution, supervising it and offering help to pupils to solve problems that face them while executing the project.

- **Judging the project: "**In this step too, the teacher reunites with the pupils, but this time to discuss the achieved results, to judge the project in light of its underlined objectives and to recognize the mistakes that accompanied the project's execution by attempting to treat them, or to avoid them when executing another project" (Mansour Ahmed Abdelmanaam, Hassane Ahmed Abdelbaset ،2002 ،p. 104.105) While Souhila Mohsin Kadhim Alfatlawi (2006, p. 398) had determined the project completion steps as follows:

- **The introductory step:** In which learners are motivated to work, then a list of works or projects that are supposed to be realized is represented, then permitting learners to choose what they desire by urging them to examine and read.
- **The objectives determination:** Attract the learners' interests for the importance of realization through determining and clarifying the objectives as well as the value and the benefit of realizing them.
- **Setting the plan:** The learners reunite with their teacher in order to set a work plan according to a particular period, where roles are determined and distributed.
- **The execution step:** It is the work and activity step, in which the actual execution of the designed plans starts in order to realize the desired objectives.
- **The evaluation step:** In which the learners reunite with their teacher to discuss the realized results and judge them in light of the desired objectives.

While The National Education Ministry in Algeria, through its programs, has studied the projects' elaboration method by adopting the following steps and stages:

- "Determining the competence/competencies that are declared in the curriculum.
- Renewing the tools that are related to the project.
- Determining the realization period and the work form: individually, in pairs or collectively.
- Distributing tasks to pupils.
- The project evaluation step" (Bournane, p. 49).

Through these steps, we can set an artistic card for the project (Amimire, Abdulaziz, 2005, p. 86). which includes the following elements:

- The level.
- The number of activity.
- The period.
- The necessary materials.
- The persons in charge of realization.
- The pupils' number.
- The activity's relationship with the educational units (…) in the material of …
- **The open work method:**
- The knowledge…
- The objectives (1………. 2……… 3……….).
- The target abilities.
- The expected competencies.
- **The general evaluation:**
- The achieved results…
- The success percentage … % why ……….
- The failure percentage … % why ……….

In order to have "a project that represents a unity of scientific-practical procedures, it has to fulfill the following terms:

- To be socially important.
- To have a clear objective.
- To include searching, prospecting as well as facing problems and solving them.
- To involve learners in its organization step, supervised by their teachers" (Djamel, 2002, p. 149)

11. Conclusion:

In this study, we intended the theoretical rooting of the project completion status and attempted to edit its theoretical frame, where we started with determining the definition of the status, the project and the project completion status, then we represented a historical overview about them. Subsequently, we noted the target objectives and competencies in the project completion status, and we treated their types and characteristics. Thereafter, we noted the project completion steps and stages, note that the studies and researches, which treated the project completion status, showed that this latter is interested in linking and opening school to the external environment, where the learner plays the role of the fundamental actor, while the teacher follows, orients and guides him. This status works on developing the pupils' initiative spirit, teaches them the meaning of responsibility and self-dependence and develops the collaboration spirit in their minds, note that the activities that fall under the educational-learning act are related to practice and work, depending on many steps that concern preparing the learner for the social reality.

.Accordingly, we have put forward recommendations as follows:

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

- Unifying scientific visions through holding seminars, forums and conferences in the field of education in general and the field of project pedagogy in particular.

-it is very important to pay more attention, research and examination to the term's study and understanding, being one of the most important conditions in the educational-learning process,

-in addition to orienting the learners towards the execution of searching projects that are related to the project completion status, theoretically and practically, by the educational specialists and the researchers, under the related foundations' supervision.

- Work on developing the autonomy of learners in educational institutions through research, accountability, discovery and expanding their perceptions from theoretical to practical and from abstract to tangible.

References:

- Abdullah, K. (n.d.). *(B.T), Arabic language and literature* (Vols. fourth year, the second book). Algeria: university of Continuing Education, Bouzareah.

- Abdullatif, A.-D. (2009). *The fundamental competencies integration and evaluation.* Casablanca, Morocco: Alam Attarbiya" publications.

- Abdulsalam, R. A. (2005). Why the approach by competencies and the project's pedagogy? A book for teachers" . *"Achahab" publications*.

- Abou Taleb Mohamed Assaid, R. A. (2001). *The applied science of education, the methods and the technology – teaching and evaluating them.* Beirut, Lebanon: Annahda Alarabi.

- Ahmed, O. (2007). *Teaching by competencies, a bet on the quality of education!* Casablanca, Morocco: , "Annadjah" printing house.

- Alabrachi, M. A. (1993). *The education and learning spirit* . Cairo: Alfikr Alaraby .

- Alayasra, W. R. (2012). *The environmental education and its teaching strategies.* Oman, Jordan: "Oussama" edition house .

- Alfatlawi, S. M. (2006). *The educational curriculum and effective teaching.* Oman, Jordan: "Achourouk" edition house.

- Alkadhi, K. R. (2006). *Lissane Al-Arab* (Vol. 4). Lebanon, Beirut: edition house.

- Amimire, A. (2005). *The teaching by competencies approach. What is it? How?"* . Algiers, El Biar: "Thala" publications .

- Annafati, Tahar Ali. (2002). *The general teaching methods.* (e. house, Ed.) Benghazi, Libya: Alkotob Alwataniya.

- Assakrane, M. (1989). *The social studies teaching methods* . Oman : "Achourouk" edition house.

- Atia, M. A. (2009). *"The new curricula and teaching methods.* Oman, Jordan: "Almanahidge" edition house.

- Bebbouchi-Fekkar, Z. (2009). A problem situation in nature and life sciences" (Une situation problème en science de la nature et de la vie), the National Center of research in social anthropology of education and training system, the approach by competence. *the approach by competence, problems and learning, Colloquium act (CTASC) and the Direction of Education in the state of Oran, April 30th, .*

- Bournane, S. (n.d.). "The project's pedagogy in the programs of teaching Arabic language and literature. *teaching Arabic language, "Almoraby" magazine*(19th issue).

- Djamel, A. A. (2002). *Methods of teaching social materials* (1 ed.). Oman: , "Almanahidge" edition house.

- Hadji, F. (2006). Educational and pedagogical concepts . *Almoraby*, the Algerian magazine of education, the National Center of Educational Documents.

- Hanni, K. (2005). *The teaching by competencies approach* (1 ed.). Algeria.

- Huber, M. (2005). *Preface of Jean Marie Barbier, learning in projects, the project's pedagogy – pupils" (Préface de Jean Marie Barbier, apprendre en projets, la pédagogie du projet – élèves), reviewed and augmented , Ly* (2 ed.). French social chronicle.

- Maggy Pierret, H. P. (2006). *Practices for today school* (2nd edition ed.). Brussels, DeBoeck: Victor Nizet preface.

- Mansour Ahmed Abdelmanaam, H. A. (2002). *Teaching social studies and using advanced technology* . The Anglo: Egyptian library.

- Ministry, T. N. (2005). *the Arabic language and literature curriculum in the secondary education.* Algeria: the National office of School Publications.

- Ministry, The National Education. (2011). *the Fundamental Education Direction, the National Committee of Curricula.* June: he document that accompanies the second year curricula of the primary educationt.

- The National Education Ministry, (2009) , The National Committee of Curricula, "The methodological guide for the curricula elaboration", an adapted version to the education's guideline n° 04-08 on January 23th, 2008.

- Nabahate, Yahia Mohamed. (2008). *The modern methods in education and learning.* Jordan, Oman,: without an edition Alyazoury" scientific house.

- Proulx, J. (2008). *Learning by projec(Apprentissage par projet).* Quebec, Canada: Quebec University Press.

- Ramadane Arzile, M. H. (2002). *Towards an education strategy by approaching competencies. The procedural milestones of the approach.* (t. s. part, Ed.) "Al-Amel" edition house.

- Suleiman, T. N. (2004). *The approach by competencies New pedagogical concepts in education without an edition* . Algeria: "Al-Amel" edition house .

E-ISSN: 2289-9065 | https://jhdesr.misd.tech

- Tridi, Badr Al-Din Bin Rachida Ayet Abdulsalam. (2010). *The modern dictionary of education – Arabic. English. French.* The Supreme Council for Language publications.

- Vassileff, J. (1997). *The pedagogy of project in training (La pédagogie du projet en formation)* (4 ed.). Nantes.

-Xavier Rogers, (2000)“The integration pedagogy” (Une pédagogie de l’intégration), Brussels, DeBoeck.